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Reanalysis of Existing Data on Perceived Benefits, Barriers and Solutions to Accessing Greenspaces in Deprived Communities

Safir Maner

**Doctorate in Clinical Psychology
August 2020**

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Abstract

This thesis was initially designed to include two papers, both relating to the study of compassion: a review paper focusing on the effectiveness of Compassion Focused Imagery (CFI) and an empirical qualitative research project exploring self-compassion with adults who experience Dissociative Seizures. Due to Covid-19 outbreak the empirical research project was terminated before the completion of data collection. Therefore a third paper was included in the thesis, which presents a secondary analysis of an existing dataset from a qualitative project unrelated to compassion.

Paper 1 presents a systematic review of the effectiveness of CFI on psychological outcomes across clinical and non-clinical populations. The aims of the review were to provide qualitative synthesis of existing literature and to provide effect size calculations for outcome measures relevant to compassion literature (self-compassion, self-criticism and shame). Sixteen records were identified and reviewed. Most of the studies reported improvements in self-compassion and positive affect, reduction in self-criticism, shame and paranoia. Effect sizes ranged between 0.19-0.99 across measures of self-compassion, self-criticism and shame. Methodological weaknesses and heterogeneity between the studies make it difficult to draw strong conclusions regarding the effectiveness of CFI as a stand-alone intervention.

Paper 2 presents the rationale and methods for the terminated empirical project on Self-compassion and Dissociative Seizures. Dissociative Seizures refer to paroxysmal events that resemble epilepsy without the epileptic activity in the brain. The qualitative project had intended to explore patients' views and experiences with Self-Compassion and their perceived barriers and facilitators to taking a self-compassionate stance. Even though it was not possible to complete the project, it was felt important to document the work undertaken so far for reasons of transparency and for demonstration of relevant research competencies.

Paper 3 presents a secondary analysis on an existing dataset which was initially recruited as part of an MSc research project in 2018. This was a qualitative research project exploring the views of participants from deprived communities, about the perceived benefits, barriers and proposed solutions to increasing engagement with greenspaces. The dataset was considered suitable for secondary analysis since first wave of analyses indicated divergence of themes among the research team. Eleven unidentifiable interview scripts were analysed using a constructivist Grounded Theory approach. Since external factors impacting on engagement are already well discussed in literature, the analysis presented focused on less well-covered themes and themes relating to internal factors. The emergent themes were discussed in the context of existing literature to facilitate future interventions for improving engagement.

Lay Summary

Compassion refers to the ability to recognise our or others' distress and to act towards relieving it. The first two papers presented in this thesis relate to the study of compassion.

The first paper is a review of the evidence for how well compassionate imagery (imagining receiving compassion from others or from ourselves) helps with psychological well-being. The review found 16 studies which used compassionate imagery. Most of these studies reported improvements in psychological outcomes (such as being more self-compassionate, having less self-criticism, shame and paranoia) after participants completed brief compassionate imagery sessions. However the review showed that some of these studies were not methodologically strong, which makes it more difficult to draw conclusions about the effectiveness of compassionate imagery.

The second paper outlines a research project which aimed to explore how people with Dissociative Seizures experience compassion and what barriers they perceive in being more self-compassionate. Dissociative Seizures refer to sudden epilepsy-like seizures, although there is no epileptic activity in the brain. Previous studies show that patients who experience these seizures can have a negative perception of themselves, can be self-critical and experience shame with regards to their condition. This research project aimed to interview patients with Dissociative Seizures to explore their experiences with compassion and what helped them or prevented them from acting self-compassionately. Unfortunately due to Covid-19 outbreak, it was not possible to complete this study. This paper outlines the reasons for designing this research project and how it was intended to be carried out, should it have been possible to do so.

To be able to show the necessary research skills, a third paper was included in the thesis which provided the opportunity to analyse and appraise results. This paper presents a repeat analysis of existing interviews, which were previously collected as part of a different project in 2018. This study related to greenspaces (e.g. areas of vegetation, such as parks, woodlands, meadows). Greenspaces are known to have significant psychological and physical health benefits and can particularly benefit individuals in deprived communities. The project aimed to find out views of individuals from deprived communities, about what benefits and barriers to spending time in greenspaces they experienced, and their proposed solutions to improve how much people spend time in greenspaces. The analysis focused themes that are less frequently discussed in the field to inform future interventions to help people attend and spend more time in greenspaces.

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1 A Systematic Review of the Effectiveness of Compassion Focused Imagery in Improving Psychological Outcomes in Clinical and Non- clinical Adult Populations

Manuscript prepared for submission to Clinical Psychology and Psychotherapy

(Submission guidelines see Appendix A)

Word count: 6631

1.1 Abstract

Compassion-focused imagery (CFI) is a technique used to facilitate self-compassion by constructing and exploring imagery of a compassionate ideal. It is commonly used in Compassionate Mind Training, as part of a wider skills training intervention. This review aimed to explore the effectiveness of CFI on psychological outcomes, when it is used as a brief standalone intervention across clinical and non-clinical adult populations. Population-specific effects were also explored.

Following an extensive literature search, sixteen records were identified for inclusion in the review. Quality and risk of bias assessment was completed using the Effective Public Health Practice Project (EPHPP) tool. Where available, effect sizes were calculated for outcome measures of self-compassion, self-criticism and shame. Study findings were qualitatively synthesized.

Most of the studies reported improvements in psychological outcomes, such as improvements in self-compassion and positive affect, reduction in self-criticism, shame and paranoia. Effect sizes varied between 0.19-0.99 across measures of self-compassion, self-criticism and shame. The findings were evaluated in the context of methodological weaknesses and heterogeneity between the studies. It was not possible to ascertain population specific effects of CFI across all of the clinical samples included. However results were discussed in relation to additional specific needs some clinical populations may need during CFI interventions.

Keywords: Compassion Focused Imagery, Compassion Focused Therapy, Compassionate Mind Training

1.2 Introduction

1.2.1 Compassion

The construct of compassion, which can be traced back to ancient Buddhist traditions, has received increasing attention from Western science over the last decades (Barnard & Curry, 2011; Gilbert, 2005). Compassion has been conceptualised through different perspectives and there is a lack of consensus about its definition, operationalisation and measurement (Strauss et al. 2016; Muris & Petrocchi, 2017). Earlier definitions of compassion focused on the emotional component of compassionate experiences, defining it as an empathic distress or a combination of emotions such as love and sadness in reaction to others' distress (Goetz, Keltner & Simon-Thomas, 2010). However it is now recognised as a multi-dimensional construct which includes cognitive, affective and motivational elements (Jazaieri et al. 2013; Strauss et al. 2016).

Compassion can be described as an affective state which arises as a response to others' suffering and results in a desire to help (Goetz, Keltner & Simon-Thomas, 2010). Similarly, Gilbert (2010a) described compassion as 'a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it'. He conceptualised compassion as part of an evolutionary motivational affect system which helps to regulate negative affect, respond to the distress of self and others, and facilitate feelings of safeness and warmth (Gilbert, 2014).

Three separate orientations are described to facilitate compassionate feeling: compassion for others, compassion from others and self-compassion (Gilbert, 2009). Experiences of compassion has been shown to affect mental health and well-being. Studies observed negative associations

between self-compassion and psychopathology (MacBeth & Gumley, 2012), rumination and self-criticism (Neff, Kirkpatrick & Rude, 2007). There is a growing body of compassion-based interventions, which aim to facilitate cultivation of compassion towards self and others (Kirby, 2017). There is emerging evidence into the effectiveness of these interventions, in improving negative affect and reducing psychological distress, facilitating the experiences of compassion, self-compassion, mindfulness, and improving well-being (Kirby, Tellegen & Steindl; 2017).

1.2.2 Compassion Focused Therapy

Compassion-Focused Therapy (CFT) which was developed by Paul Gilbert, combines an evolutionary perspective with neuroscience, attachment and social mentalities theories to provide a framework for the therapeutic application of compassion (Gilbert, 2010a). It was originally developed for clients with high levels of self-criticism and shame who have difficulty generating self-warmth and who report limited affect shift, despite being able to generate alternative thoughts during cognitive behavioural therapy (Gilbert & Proctor, 2006).

The CFT model proposes that throughout evolution, humans have developed three motivational affect systems with distinct neurophysiological substrates – the threat system, the drive system and the soothing system (Gilbert, 2010a): According to the model, the threat system corresponds to the fight or flight reactions in mammals; the drive system enables reward-based goal attainment behaviours and the soothing system is connected to the attachment processes, promoting a sense of safeness and affiliation . An imbalance between these systems is proposed to contribute towards psychological distress (Depue & Morrone-Strupinsky, 2005; Gilbert, 2009). Therefore one of the aims of the therapy is to restore this balance by improving the individuals' awareness of their affective systems and cultivating a more compassionate self-to-self

relationship through the acquisition of compassionate attributes and skills (Gilbert, 2009). This is therapeutically done through Compassionate Mind Training (CMT), which refers to the range of techniques, such as soothing-rhythm breathing, compassionate imagery, letter-writing, enactment of compassionate self and chair work, that help with the acquisition of compassionate attributes and skills (Gilbert, 2010b).

An early systematic review of fourteen studies across clinical and non-clinical samples provided a summary of favourable outcomes for CFT such as improvements in mood, compassion and well-being (Leaviss & Uttley, 2015) . A subsequent review demonstrated a range of small to large treatment effects for CFT in self-compassion, shame and self-criticism across clinical samples (Tsivos, 2015). Even though the emerging evidence was promising, both reviews drew attention to the lack of large and well controlled study designs, inconsistencies in measurement and heterogeneity within the content of CFT interventions.

1.2.3 Aims of the Review

While evidence for the effectiveness of CFT interventions is emerging, less is known about the effectiveness of the specific components and mechanisms of action that make up the therapeutic process (Campbell et al., 2019). This is important in the context of transdiagnostic interventions when different components may be differentially effective for different client groups. A better understanding about the effectiveness of the therapeutic components of CMT could help clinicians develop interventions which are better-tailored towards the needs of their clients.

One of the commonly used components of CMT is Compassion Focused Imagery (CFI). By constructing and exploring imageries of a compassionate ideal (self or other), CFI encourages the

clients to imagine compassionate attributes through this imagined ideal and practice embodying this ideal over time (Gilbert, 2009).

CFI is proposed to activate the soothing system by providing an internal compassionate representation and by facilitating feelings of warmth and affiliation (Gilbert & Irons, 2005). Physiological studies indicate that CFI can evoke different heart rate variability and cortisol reactions, some individuals experiencing increased heart rate variability (HRV) and a drop in cortisol (suggesting activation of soothing system), whereas others showing reduced HRV (suggesting a threat-based reaction) (Rockliff, 2008). These differences indicated that individuals with high-self criticism and insecure attachment may experience CFI to be threatening. Similar findings were also noted where individuals with high trait self-criticism experienced difficulties in generating compassionate imagery and instead accessed hostile and self-critical images more easily (Gilbert et al. 2006).

The present review aimed to explore the effectiveness of CFI on psychological outcomes when it was used as a brief and stand-alone intervention. The research questions were as follows:

1. What is the effectiveness of CFI in improving psychological outcomes for clinical and non-clinical adult populations?
2. Are there any population specific effects of CFI across different clinical samples?

1.3 Method

An initial search was completed within the CRD Database Abstracts of Reviews of Effects (DARE) and PROSPERO to ensure a similar review was not already completed. A systematic review protocol was developed between November – December 2019 by the lead author, which has been registered on PROSPERO (Project ID: CRD42019158720).

1.3.1 Search Strategy

An extensive literature search was conducted, using online bibliographic databases MEDLINE (via Ovid), Embase, PsycINFO, PsycARTICLES. Time restrictions were not set for the database searches. Ahead of print and in-press publications were included where possible. PROQUEST was also searched to identify any unpublished thesis studies relevant to the review questions. Additionally, reference lists of studies included in the review were hand-searched for relevant articles. Key journals, conference proceedings, posters and other internet resources were also reviewed for identifying studies that may fit the eligibility criteria.

Scoping searches were conducted to identify the most inclusive and relevant search terms. A research librarian was consulted for developing an effective search strategy. Table 1.1 presents the search strategy. The strategy captured hyphenated versions of all terms to ensure a comprehensive search. Only studies written in English language were included in the review due to limited resources for translation. The search was completed by the lead author in December 2019.

Table 1.1 The search strategy	
Search	Search Term
1	Compas*
2	Image*
3	(1) and (2)
4	Deduplicate (3)

1.3.2 Study Selection and Eligibility Criteria

Following the database searches, studies were screened for eligibility by scanning the titles and abstracts. Studies which appeared appropriate for inclusion were exported into EndNote for full text review before a decision was made regarding their eligibility. The following eligibility criteria were applied when screening studies for inclusion:

Population: To maintain a wider scope, the review included studies with both clinical and non-clinical adult populations. Studies with children and adolescent participants (under 18 years of age) were excluded from the review.

Intervention: Studies which included compassion-focused imagery as the primary intervention were included in the review. The interventions could be delivered within any medium (e.g. face to face, online, group, participant-led at home). Compassion-focused imagery was defined as imagery interventions where the aim was to improve and facilitate participants' ability to hold more compassionate views of themselves by imagining a more compassionate self, other or a thing. This definition is congruent with Gilbert's theoretical model of compassion (Gilbert, 2009) and is frequently used in compassion-focused therapy interventions. Studies which used an imagery intervention based on a different conceptualisation of compassion (e.g. Loving Kindness meditation) were not included due to differences in theoretical and conceptual underpinnings.

Studies which included an additional psychoeducation component about compassion (prior to the imagery intervention) were not excluded from the review, since such psychoeducation provides a rationale for the intervention and is routinely incorporated into compassion focused therapy interventions (Gilbert, 2010a). However, where other aspects of compassion-focused interventions (e.g. letter writing/chair work/self-talk) or other psychological interventions were incorporated alongside the imagery intervention, these studies were excluded from the review.

Comparator: A comparator imagery control condition was not set ahead of time. Studies which did not include a control condition were not excluded from the review.

Outcomes: Only the studies which adopted an experimental study design, with pre- and post-intervention outcome measures were included. Randomized and non-randomized designs were both included. Single case studies and any other study which did not report pre and post-intervention outcomes were excluded.

The primary outcome measures included in the review were measures of compassion or self-compassion. Considering the different conceptualisations of compassion within the literature, the current review only included studies which used Gilbert's definition of compassion (2010a). Since scoping research indicated heterogeneity in outcome measures (e.g. for self-compassion), no limitations were set for which compassion outcome measures would be included.

Studies which did not report on compassion-related measures were not excluded from the review as long as they reported on other psychological outcomes, such as depression, anxiety, distress,

and other relevant psychological measures pertinent to specific populations studied (e.g. outcome measures specific for psychosis or eating disorders). The review included outcome measures reported at the baseline and post-intervention time points. When long-term follow-up data was reported, this was also included in the review.

1.3.3 Data Extraction

The lead author conducted the data extraction. A data extraction form was adapted from National Institute for Clinical Excellence (NICE, 2012) guidelines to summarise information pertinent for the review. This data extraction form was created on Excel and included information regarding study aims, design and methods, population demographics, information on intervention and control conditions, outcome measures and treatment outcomes.

1.3.4 Assessment of Quality and Risk of Bias

The assessment of quality and risk of bias was conducted using the Effective Public Health Practice Project (EPHPP, 1998). This assessment tool can be used for randomised and non-randomised studies. It is a structured assessment tool which evaluates risk of bias across eight domains which include; selection bias, study design, confounders, blinding, data collection methods, withdrawals and drop-outs, intervention integrity and analyses. Each study is given a rating of “Strong/Moderate/Weak” across each domain. A dictionary accompanies the assessment tool and provides additional guidance about what evidence counts towards the different rating categories for each domain. The component ratings are used to obtain a global quality rating for each study. Accordingly, a study which receives no “Weak” ratings across any of the domains is assigned a “Strong” global rating. If there is one “Weak” rating across any of the domains

assessed, then the study is assigned a “Moderate” global rating. If there is two or more “Weak” ratings, the study is assigned a “Weak” global rating.

The quality and risk of bias assessment was completed by the researcher. Half of the studies which were included in review were randomly selected and reviewed by a second rater who was also a doctoral trainee. Based on the domain-specific ratings on the quality assessment tool, the inter-rater reliability between the two raters was moderate ($\kappa = 0.63, p < .001$). Disagreements, which were mainly due to differences in the interpretation of the rating scale guidelines, were settled through discussion.

The quality assessment ratings were taken into consideration in deciding whether studies with “Weak” global ratings should be included in data synthesis. Four studies which had “Weak” global ratings, had less than or equal to three ratings of “Weak” across the six assessment domains. On this basis, they were deemed not to be severely compromised and thus were included in the qualitative synthesis, with the intention to discuss the potential implications of this in the Discussion section.

1.3.5 Effect Sizes

Effect sizes (ES) were calculated on the main psychological outcomes. These psychological outcomes were mainly those relevant to compassion focused therapy constructs (self-compassion, self-criticism and shame). Data were extracted and calculated by hand in Excel.

For studies which did not implement any control condition, effect sizes were calculated using Cohen's d , using the following formula (Field, 2018):

$$d = \frac{M_{\text{Pre}} - M_{\text{Post}}}{SD_{\text{Pre}}}$$

For studies which implemented a control imagery condition, Cohen's d was calculated separately for the experimental and control groups and an estimate of the treatment effect was obtained by taking the difference between the effect sizes in experimental and control groups using the following formula (Becker, 1988; Rohling, Faust, Beverley & Demakis, 2009):

$$d = \left[\frac{M_{\text{exp. Pre}} - M_{\text{exp.post}}}{SD_{\text{Exp.Pre}}} \right] - \left[\frac{M_{\text{control Pre}} - M_{\text{control Post}}}{SD_{\text{Control Pre}}} \right]$$

1.4 Results

The database search returned 1468 studies in total. Figure 1.1 presents the PRISMA diagram detailing the study screening and selection process.

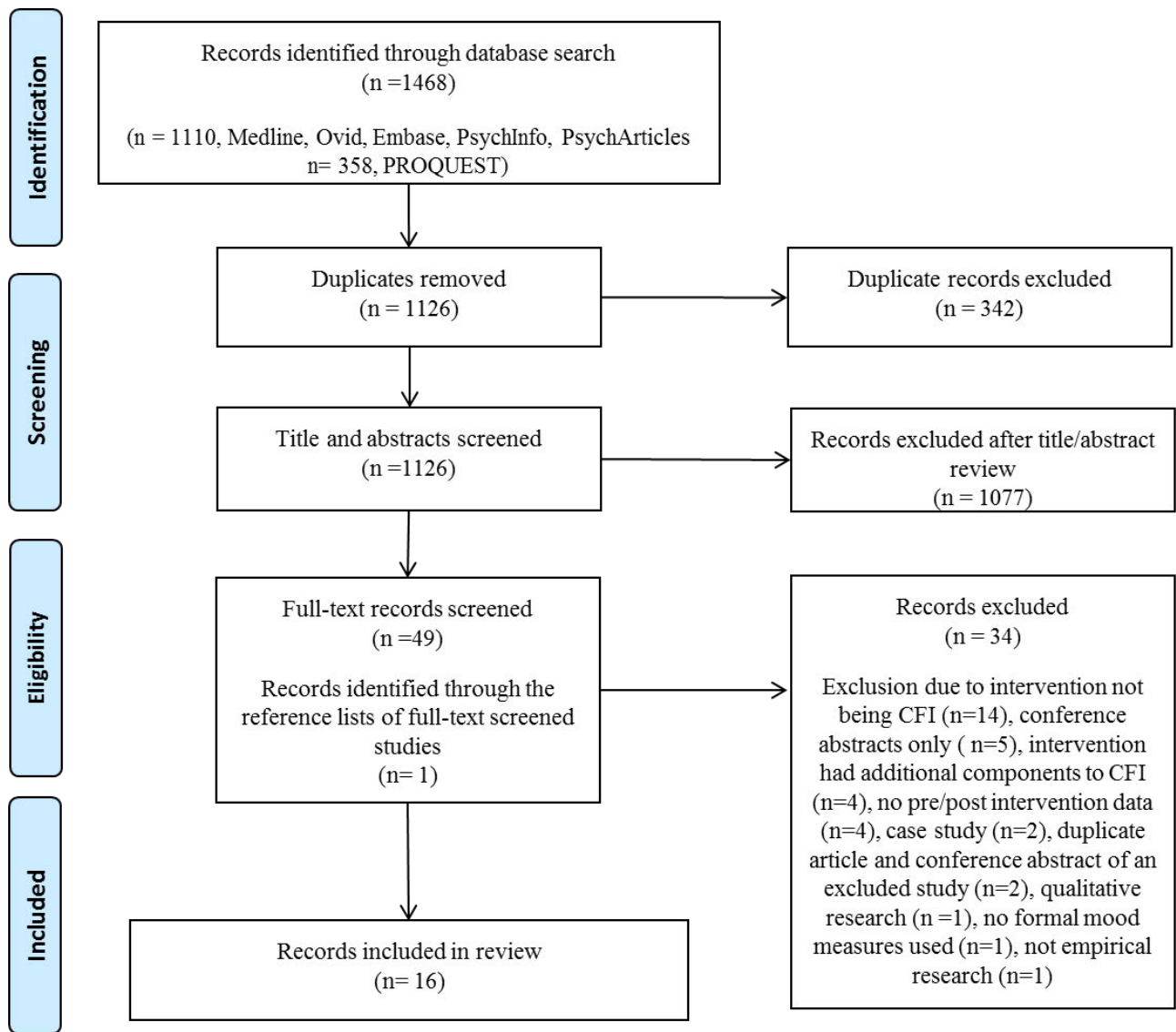


Figure 1.1 PRISMA Diagram of study identification and selection

After the removal of the duplicates, remaining 1126 studies were screened by title and abstract to determine eligibility. 49 studies were identified for review by full text. An additional study was

identified while going through reference lists of a considered study. Full-text review resulted in exclusion of 34 studies; Appendix B presents the excluded studies and reasons for exclusion. Remaining 16 studies were assessed for eligibility for inclusion; 13 of which met the criteria. Among the 16, three studies were thesis projects of the included studies. These were included in the review alongside their associated studies and were consulted for additional information where needed. Due to the heterogeneity among the studies included in the review, a systematic review with qualitative synthesis was completed.

1.4.1 Study Characteristics

A summary of study characteristics and main outcomes are presented on Table 1.2. The majority of the studies (10) were conducted in the United Kingdom (UK). Two were conducted in Germany and one in Colombia. Participant populations included non-clinical samples (mostly university students, 5), ecstasy users (2), severe head injury (2), personality disorder (1), sub-clinical eating problems (1), depression (1) and psychosis (1). All of the studies involved face-to-face administration of the imagery intervention, with the exception of one which trialed an online delivery method (McEwan & Gilbert, 2016).

The imagery exercises ranged from 5 minutes to 50 minutes across the studies. Majority of the studies implemented a single imagery intervention session. Three studies implemented single intervention sessions with instructions for continued home practice (Naismith et al., 2018; McEwan & Gilbert, 2016; Gilbert & Irons, 2004). Three studies (Kamboj et al. 2015, 2018; Rockliff et al. 2011) looked at enhancing effects of substances on CFI and implemented two separate testing sessions (CFI only and CFI+substance). For the purposes of this review, the CFI only conditions were reported as the main outcome for these studies.

Table 1.2 Summary of study characteristics

Study	Population	Method	Participants	CFI Intervention Details	Control Condition	Relevant Outcome Measures	Summary of main findings
Ascone et al., 2017 Germany	Psychosis (+ paranoid ideation)	Repeated measures randomized design	N = 51 36 M, 15 F Mean Age: N/A	1 session – 10 minutes CFI task	Neutral imagery task: Focusing on a chair	FSCRS, SCS, PANAS, Paranoia Checklist	CFI resulted in significant improvements in self-reassurance and happiness, but not on negative self-relating or paranoia. But negative affect dropped both in CFI and control conditions
Campbell et al., 2019 & Campbell 2014 U.K.	Severe Head Injury	Cross sectional experimental design	N = 24 20 M, 4 F Mean age: 47 (SD: 8.4)	1 session – 50 minute CFI task + 20 min preparatory video	Relaxation Imagery	EQ, SCS, STAI	No change attributable for CFI (despite the longer and more reinforced intervention and preparatory video) compared to relaxation (neither self-report no heart rate responses).
Duarte et al., 2015 U.K.	Non-clinical sample of university staff and students	Mixed Design (Repeated and Between subjects)	N = 29 All F Mean age 24.96 (SD: 6.49)	1 session- Same CFI transcript as Rockliff et al., 2011.	Control Imagery	SAAS, TPAS, PANAS, Alpha amylase recording	Compared to Low Self-critics (LSC), High self-critics(HSC) showed greater increase in stress hormone in both CFI and control imagery tasks, when compared to non-intervention control. HSC reported more unsafeness/insecurity on entering imagery interventions. Safeness scores increased in control imagery but not after CFI.
Gilbert & Irons, 2004 U.K.	Depression (High self-critics)	Cohort design	N = 9 2 M, 7 F	10 minute CFI task introduced in 2 nd group session + home as often as possible for the duration of group	None	Interval contingent diary	Small reduction in self-criticism at the end of the group compared to baseline but not reaching significance. Significant increase in ability to generate CFI images and ability to self-soothe in self-critical situations.

Study	Population	Method	Participants	CFI Intervention Details	Control Condition	Relevant Outcome Measures	Summary of main findings
Kamboj et al., 2015 U.K.	Ecstasy users	within subjects naturalistic experimental design	N = 20 13 M, 7 F Mean Age: 25.5 (SD:3.59)	2 separate testing sessions (with and without ecstasy). 18 minute CFI task in each session	Control condition not related to imagery	TPAS, PANAS, SCCS, BDI-II, FSCRS	<p>Significant reduction in self-criticism following CFI. This effect twice as larger when CFI and ecstasy condition.</p> <p>Similar to ecstasy, CFI alone had a sociotropic effect, even though compassion self-directed rather than other-directed.</p>
Kamboj et al., 2018 U.K.	Ecstasy users	within subjects naturalistic experimental design	N = 20 12 M, 8 F Mean Age: 28.45 (SD: 6.16)	Same as Kamboj et al. 2015	Control condition not related to imagery	TPAS, PANAS, SCCS, BDI-II, Empathy Assessment Task, ECG recordings	<p>CFI only and MDMA only conditions led to small to medium increases in self-compassion. Small but significant added increase in self-compassion when CFI and MDMA administered together. Emotional empathy in response to critical faces increased following CFI only condition. MDMA and CFI indicating a trend for reducing self-criticism, but non-significant.</p>
Lincoln et al. 2013 Germany	Non-Clinical Student Sample	RCT	N = 71 23 M, 48 F Mean Age: 23.2 (SD: 5.6)	1 session- 10 minute practice then 5 minute guided application of CFI	Neutral imagery (visualizing chair)	ADS, RSE, Paranoia checklist	<p>CFI led to significantly less reported paranoia, lower levels of negative emotions and higher self-esteem compared to control imagery condition. CFI's improvement on paranoid beliefs mediated through reduction in shame, anger, anxiety and sadness.</p>

Study	Population	Method	Participants	CFI Intervention Details	Control Condition	Relevant Outcome Measures	Summary of main findings
McEwan & Gilbert, 2016 U.K.	Non-Clinical Student Sample	Repeated Measures	N = 45 12 M, 33 F Mean Age: 30.73 (SD: 9.93)	Online delivery. Participants to practice CFI 5 minutes daily for two weeks	None	SCS, FSCRS, DASS	Significant increases were found in self-compassion and self-reassurance and reductions found in self-coldness, self-criticism, depression, anxiety, and stress. Higher self-critics showed the largest improvement in scores. Follow-up data at 6 months revealed results were maintained with the exception of stress which increased.
Naismith et al., 2018 (Study 2) + Mwale, 2017 U.K.	Personality Disorder (mostly BPD)	Repeated measures design	N = 17 2 M, 15 F Mean Age: 34 (SD: 10.06)	Daily 5-minute CFI practice (either imagined ideal or memory) for a week	None	SCS-SF	Self-compassion significantly increased compared to baseline with regular CFI practice (5 times/more). Change in self-compassion correlated with practice frequency. Higher baseline of self-compassion predictive of higher practice frequency.
Naismith et al., 2019 Colombia	Non-clinical student sample	RCT	N = 160 44 M , 114 F Mean Age: 20.64 (SD: 19.95)	1 session- CFI task with two different sensory enhancements	Control condition not related to imagery	PsiQ, FSCRS, PANAS, Qualities of Compassion, Compassionate affect, ISS	Relevant outcome: significant reduction of shame from the recalled memory after CFI. People higher in pre-shame experienced greater reduction in shame.
O'Neill & Macmillan 2012 + O'Neill, 2011 U.K.	Severe head injury	Between group repeated measures	N = 24 21 M , 3 F Mean Age: 42.21 (SD: 13.61)	1 session – 30 minute CFI task	Relaxation imagery	SCS, EQ, Relaxation	Self-compassion increased after 1 session but not reaching significance and not specific to intervention (control also got better). No change in empathy scores.

Study	Population	Method	Participants	CFI Intervention Details	Control Condition	Relevant Outcome Measures	Summary of main findings
Rockliff et al., 2011 U.K.	Non-Clinical Student Sample	within subjects counterbalanced RCT	N = 41 26 M, 15 F Mean Age: 26.03 (SD: 8.53)	2 sessions (CFI with and without oxytocin)- 5 minute relaxation + 7 minutes CFI task on both sessions	Control condition not related to imagery	PANAS, TPAS, ease of CFI attachment, social safeness scale, self-criticism and attack scale	Significant improvements in positive affect after CFI. Oxytocin enhanced ease of imagining compassionate qualities. People with lower self-reassurance and social safeness found it significantly more difficult to engage with compassionate emotions.
Tsivos, 2015 U.K.	Subclinical eating problems	RCT	N = 66 All F Mean Age: not provided for whole sample	Socialisation to compassion. 1 session of 25 minute guided CFI task and practice at least once more until follow-up	Neutral imagery and no imagery conditions	SCS, DASS, OAS, FSCRS, EDE-Q, FSCS	Significant reductions in externally perceived shame in CFI group, compared to neutral imagery condition. No significant improvement in self-compassion in CFI. Non-significant increases in self-compassion and reduction in self-criticism, depression, stress and anxiety compared to neutral imagery condition.

Abbreviations: SCS: Self-Compassion Scale, SCS-SF :Self-Compassion Scale Short Form, PANAS: Positive and Negative Affect Schedule, TPAS: Types of Positive Affect Scale, STAI: State-Trait Anxiety Inventory, EQ:Empathy Quotient, FSCRS: The Forms of Self-Criticising/Attacking & Self-Reassuring Scale, SCCS: State self-compassion and criticism scale, BDI-II:Beck's Depression Inventory II, DASS: Depression Anxiety and Stress Scale, EDE-Q: Eating Disorder Examination Questionnaire, OAS: Other as Shamer Scale, FSCS: Forms of Self-Criticism Scale, ADS: Allgemeine Depressions Skala (General Depression Scale), RSE: Rosenberg Self Esteem Scale, SAAS: State Adult Attachment Scale, PsiQ: Plymouth Sensory Imagery Questionnaire

1.4.2 Assessment of Risk of Bias

A summary of the risk of bias assessment is presented in Table 1.3, which displays the breakdown of scores across six assessment criteria and the final global rating. Three studies scored a ‘Strong’ global rating (Ascone et al., 2017; O’Neil, 2011 and Tsivos, 2015). Six scored a ‘Moderate’ global rating (Campbell et al. 2019; Kamboj et al. 2015, Kamboj et al., 2018; Lincoln et al., 2013; Naismith et al. 2019 and Rockliff et al., 2011). Four studies scored a ‘Weak’ global rating (Duarte et al. 2015; Gilbert & Irons, 2004; McEwan & Gilbert, 2016; Naismith et al. 2018).

Table 1.3 EPHPP Risk of Bias Assessment Component and Global Ratings

Study Name	Selection Bias	Study Design	Confound.	Blinding	Data Collection	Withdrawal/ Drop outs	Global Rating	Final Classification
Ascone et al., 2017	1	1	1	1	1	2	1	Strong
Campbell et al. 2019	2	1	3	1	1	2	2	Moderate
Duarte et al. 2015	3	2	1	3	1	1	3	Weak
Gilbert & Irons, 2004	3	2	1	3	3	1	3	Weak
Kamboj et al. 2015	3	2	1	2	1	1	2	Moderate
Kamboj et al. 2018	3	2	1	2	1	1	2	Moderate
Lincoln et al. 2013	2	1	1	2	1	2	2	Moderate
McEwan & Gilbert, 2016	3	2	1	3	1	2	3	Weak
Naismith et al. 2018	3	2	1	3	1	1	3	Weak
Naismith et al. 2019	3	1	1	2	1	2	2	Moderate
O’Neill & Macmillan 2012	2	1	1	2	1	2	1	Strong
Rockliff et al., 2011	3	2	1	1	1	1	2	Moderate
Tsivos, 2015	1	1	1	1	1	1	1	Strong

In some studies, higher risk of bias was associated with limitations in reporting (especially with regards to selection bias and blinding). Six study authors were contacted to clarify uncertainties where possible. Additional information was received through personal communication in relation to four studies (Kamboj et al. 2015, 2018; Campbell et al., 2019 and Lincoln et al. 2013) and this was taken into consideration for risk of bias assessment.

1.4.3 Psychological Outcomes

A range of psychological outcomes were observed across studies. Main outcome measures relevant to therapeutic application of compassion (Gilbert, 2009) such as compassion, self-criticism and shame, have been summarised below.

Outcome measures for Compassion: Most of the studies utilized the Self-Compassion Scale (SCS, Neff, 2003). Two studies (Kamboj et al., 2015 & 2018) utilized the State Self Compassion and Criticism scale (SCCS; Falconer et al., 2015). Gilbert & Irons (2004) used interval contingent diaries, asking participants to rate their self-soothing on a Likert scale over the course of a group intervention. The remaining studies did not implement a compassion-based outcome measure (Duarte et al., 2015; Lincoln et al., 2013; Naismith et al., 2019; Rockliff et al., 2011).

Table 1.4 Calculated Effect Sizes (Cohen's *d*) for Outcome Measures of Compassion, Self-Criticism and Shame

Study	Compassion		Self-Criticism		Shame	
	Measure	<i>d</i>	Measure	<i>d</i>	Measure	<i>d</i>
Ascone et al., 2017	SCS*	0.21	FSCRS*	0.4	-	-
Campbell et al. 2019 & Campbell 2014	SCS	0.09	-	-	-	-
Duarte et al. 2015	-	-	FSCRS	<i>data not available</i>	-	-
Gilbert & Irons, 2004	ICD	0.63	ICD	0.35	-	-
Kamboj et al. 2015	SSCS	0.46	SSCS	0.4	-	-
Kamboj et al. 2018	SSCS	0.38	SSCS	0.54	-	-
Lincoln et al. 2013	-	-	-	-	-	-
McEwan & Gilbert, 2016	SCS*	0.6	FSCRS Inadequate self	0.38	-	-
			FSCRS Hated self	0.19		
			FSCRS Reassured self	0.26		
Naismith et al. 2018 (Study 2) & Mwale, 2017	SCS	0.7	-	-	-	-
Naismith et al. 2019	-	-	-	-	ISS*	0.91
O'Neill, 2011 & O'Neill & Macmillan 2012	SCS	<i>data not available</i>	-	-	-	-
Rockliff et al., 2011	-	-	-	-	-	-
Tsivos, 2015	SCS	0.34	FSCRS	0.39	OAS	0.64

* denotes adapted scales. SCS: Self Compassion Scale, SSCS: State self-compassion and criticism scale, ICD: Interval Contingency Diary, FSCRS: Forms of Self Criticising/Attacking & Self-reassuring Scale, ISS: Induced Shame Scale, OAS Other as Shamer Scale; ES: Effect Size

Outcome measures for Self-criticism: Seven studies out of 13 implemented an outcome measure for self-criticism (Ascone et al., 2017; Kamboj et al., 2015 & 2018; McEwan & Gilbert, 2016; Naismith et al. 2019; Tsivos, 2015). Most of the studies utilized The Forms of Self-Criticism and

Reassurance Scale (FSCRS; Gilbert et al., 2004), with the exception of Gilbert and Irons, (2004) who used interval contingent diaries for self-criticism. Kamboj et al. (2015) used both the SCCS and the FSCRS to obtain a measure of state and trait self-criticism although only the former was used in pre- and post- intervention analyses.

Outcome measures for Shame: Only Tsivos (2015) and Naismith et al. (2019) used shame-based outcome measures, utilizing the Other as Shamer Scale (Goss, Gilbert, & Allan, 1994) and Induced Shame Scale (adapted from the Experiences of Shame Scale; Andrews, Qian, & Valentine, 2002) respectively.

1.4.4 Effectiveness of CFI on improving Psychological Outcomes

Out of thirteen studies, seven did not include a control imagery condition. The effectiveness of CFI was examined in two separate groups depending on whether a study used a control group, as this would be significant in assessing to what degree changes in outcomes could be attributed to effects of CFI alone. Table 1.4 presents calculated effect sizes for outcome measures relevant to CFT.

1.4.4.1 Studies without a control imagery condition

All seven studies reported improvements across different psychological outcomes following the implementation of CFI. Four of these noted significant improvements in self-compassion following the CFI intervention (Gilbert & Irons, 2004; McEwan & Gilbert, 2016; Naismith et al. 2018 and Kamboj et al. 2018), with moderate effect sizes ($d = 0.38 - 0.7$). Two studies reported a significant reduction in self-criticism following the CFI intervention (McEwan & Gilbert, 2016; Kamboj et al. 2015); with effect sizes ranging between low and moderate ($d = 0.19 - 0.4$). Kamboj

et al., noted that ecstasy use had a significantly enhancing effect on reduction of self-criticism when combined with CFI. However at the later study where the substance content of ecstasy was better controlled (Kamboj et al.2018), they observed a non-significant trend of reduction in self-criticism. Gilbert and Irons (2004) also reported a reduction in self-criticism, although this did not reach significance. One study reported significant reduction in shame related to a memory (Naismith et al. 2019), with a high effect size ($d = 0.91$). Rockliff et al. (2011) reported significant improvements in activated and relaxed positive affect following the CFI intervention, with large effect sizes observed ($d = 1.06$ and 1.1 respectively).

1.4.4.2 Studies with a control imagery condition

Out of the six studies which implemented a control imagery condition, three reported statistically significant improvements on psychological outcomes after CFI compared to control imagery conditions.

Ascone et al. (2017) reported significant improvements in self-reassurance and happiness following the CFI intervention in patients with psychosis and paranoid ideation. These changes were reflective of medium to large effect sizes ($d = 0.4$ and 0.99 respectively). However there were no significant differences in self-compassion, self-criticism or paranoia when compared to the control condition. However in a non-clinical student sample, Lincoln et al. (2013) reported significant reduction in paranoia when compared to control imagery condition (with a moderate effect size of $d = 0.45$). CFI was effective in improving negative affect and the reduction in shame anger anxiety and sadness were observed to mediate the enhancing effect of CFI on paranoid beliefs.

Significant reductions in externally perceived shame were reported in a sample of females experiencing subclinical eating problems following the CFI intervention, when compared to neutral imagery condition (Tsivos, 2015). This reduction in shame had a medium effect size ($d = 0.64$). Non-significant increases in self-compassion and reduction in self-criticism, depression, stress and anxiety in CFI group were also observed in comparison to control group.

Three studies, reported limited improvement in psychological outcomes following CFI intervention, when compared to a control condition. Two of these were studies completed with severe brain injury patients: O'Neil (2011) reported non-significant increases in self-compassion after CFI; however this was not specific to intervention condition. Campbell et al. (2019) reported enhanced participant motivation for intervention following the preparatory video, however reported no changes in outcome measures after CFI intervention.

One study investigated the impact of CFI on stress hormone levels in high and low self-critics (Duarte et al. 2015). High self-critics showed a greater increase in stress hormone on entering both CFI and control imagery tasks when compared to low self-critics. High self-critics were reported to feel significantly more unsafe/insecure entering both CFI and control imagery tasks. Their safeness scores increased significantly in control imagery conditions, however this trend was not observed in CFI condition.

1.4.5 Impact of CFI across different populations

The range of non-clinical and clinical samples and the diversity of the study designs make it difficult to draw population specific conclusions about the effectiveness of CFI as a stand-alone intervention. Notably, the two severe head injury studies (O'Neill, 2011 and Campbell et al.

2019) both reported no statistically significant improvements in self-compassion and empathy in comparison with a control imagery condition.

While self-criticism is not a population specific characteristic, given its implication in the generation and maintenance of psychological distress, it is important to highlight that four studies indicated significant self-criticism may be a barrier to engaging with CFI: Ascone et al. (2017) who reported improvements in positive self-relating measures after CFI, reported that negative self-relating may be more difficult to shift. Gilbert and Irons (2004) also discussed that self-critical individuals may have less memories or experiences of compassion and self-compassion to draw from, which could impact on engagement with CFI. Duarte et al. (2015) noted that participants with high self-criticism gave threat-based physiological responses upon entering the CFI condition which was not observed in control condition. Rockliff et al (2015) also indicated that participants low in social safeness found it more difficult to engage with compassionate imagery when oxytocin was additionally introduced during the imagery task. This was interpreted as oxytocin activating the attachment system and therefore the attachment style potentially impacting on how people respond to the CFI task. Participants with high self-criticism were reported to express more negative emotions such as loss and sadness, as well as anger and frustration at difficulties in generating compassionate images.

1.5 Discussion

The present review aimed to investigate the effectiveness of CFI when introduced as a stand-alone intervention, by synthesizing the available evidence. Most of the studies included in the review reported improvements on psychological outcome measures such as self-compassion, self-criticism and shame following CFI interventions. However these outcomes should be interpreted carefully, considering the methodological limitations and heterogeneity among the studies included in the review.

Out of ten studies which reported improvements in psychological outcomes following the CFI intervention, seven did not implement a suitable control condition. This means that improvements observed cannot be solely attributed to the impact of the intervention itself. Furthermore, three of these seven studies (Gilbert & Irons, 2004; McEwan & Gilbert 2016; Naismith et al. 2018) had the lowest risk of bias ratings which hazards caution when interpreting the outcomes.

Studies which did implement a control condition and which reported improvements in psychological outcomes were methodologically stronger (Ascone et al., 2017; Tsivos, 2015; Lincoln et al. 2013). These studies indicate that CFI intervention led to a more positive self-to-self relationship for the participants. On balance, the evidence suggests that CFI intervention has resulted in significant reduction of shame in two of the studies; with further improvements in negative affect (Lincoln et al. 2013) and non-significant improvements in self-compassion, depression and anxiety (Tsivos 2015). Ascone et al. (2017) on the other hand only reported improvements in self-reassurance and happiness. While these studies do report reliable

improvements, the variability between them impedes on the ability to draw more general conclusions.

Self-criticism emerged as an important factor when working with CFI. Six studies reported no improvement or non-significant improvements in self-criticism following CFI, suggesting that self-criticism may be more resistant to change. High self-critics were reported to respond more negatively to CFI. Previous research suggests that for self-critical individuals, self-compassionate stimuli may evoke negative emotional states (such as sadness or anger) by triggering memories or cognitions of lack of previous compassionate experiences from others (Gilbert et al., 2014). Self-criticism is thought to reflect, not only a negative self-to-self relationship, but also a difficulty in generating feelings of warmth and compassion (Gilbert & Procter, 2006) and is closely linked to attachment and negative parenting styles (Irons et al., 2006). CFI as a brief single intervention likely cannot create enough shift in a person's self-to-self relationship and additional methods or adaptations may be needed to impart skills for generating warmth and compassion in high self-critics.

Studies included in the review drew samples from a wide range of populations. This is understandable since compassion and its related constructs are considered from a transdiagnostic perspective. It was not possible to discern specific patterns of outcomes for specific populations due to this diversity of range. However it is notable that both of the studies investigating the effectiveness of CFI in severe head injury samples reported no changes in their respective outcome measures. This is important as some populations may have specific needs that may create a barrier in engaging with CFI when introduced as a solitary intervention. Additional resources or more rigorous input may be needed to tailor interventions according to that

population's needs. There is indeed some evidence towards the effectiveness of CFT in acquired brain injury population when a more comprehensive CMT approach was followed (Ashworth, Gracey & Gilbert, 2011; Ashworth et al., 2015)

1.5.1 Heterogeneity of Outcome Measures Used

The present review suggests that a wide range of outcome measures have been utilized to obtain an objective measure of relevant psychological constructs. Self-compassion was exclusively measured by the Self-Compassion Scale (Neff, 2003) even though Neff's theoretical conceptualisation of self-compassion shows differences to the CFT approach. The motivational aspect of recognizing distress and being moved to alleviate it is an integral understanding of compassion in CFT, which the SCS would not assess (Strauss et al. 2016; MacBeth & Gumley, 2012). This discrepancy raises concern for construct validity in research investigating effectiveness of CFT-related interventions, when SCS is used as a measure of compassion.

Even though the SCS provides a total composite self-compassion score (by adding up scores across all three dimensions), there have been inquiries into the factor-structure of the scale as some studies found a two-factor structure, perhaps reflecting self-compassion and self-criticism separately (Lopez, 2015). When using SCS, some studies in this review used the composite self-compassion score, whereas others used the SCS to obtain a self-compassion and self-criticism scores separately. This may create discrepancy among the findings of the studies, even though they are using the same scale. Difficulties in measuring compassion consistently and reliably, is closely tied to differences in conceptualisation of compassion within the literature and a more unified understanding is needed to enable researchers develop and use outcome measures confidently (Strauss et al. 2016; MacBeth & Gumley, 2012).

1.5.2 Strengths and Limitations

Inclusion of gray literature is a strength. While all of the thesis studies incorporated into the review already had an included publication, being able to consult to the theses meant more detailed information could be accessed about the studies. The calculation of effect sizes was also a strength, as it enabled a better assessment about the impact and the effectiveness of the interventions provided.

A limitation potentially affecting the risk of bias assessment was the limited availability of information in reporting for some studies. This was mitigated by reaching out to the authors and asking for further clarifications when this was possible. Three of authors had not yet responded to the inquiries at the time of the writing of this report. This could increase the possibility that some studies may have been awarded a higher risk of bias score in error. However the inter-rater reliability for the risk of bias assessment was adequate and this provides confidence that the ratings hold validity between the review author and an independent rater.

1.5.3 Conclusion

The current review provides a synthesis of existing evidence into the effectiveness of CFI as a standalone intervention. Preliminary evidence is promising, whereby most of the studies reported improvements in psychological outcomes; however the evidence is limited by the methodological challenges and heterogeneity within the literature.

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2 Exploring Self-compassion with Adults who Experience Dissociative Seizures

Word Count: 3763

2.1 Abstract

Dissociative seizures (DS) refer to paroxysmal events which look like epilepsy, without the epileptic activity in the brain. Patients often report poor psychological outcomes, perceived stigma and experiences of shame about living with their condition. Compassion is a construct closely linked with experiences of shame and negative self-to-self relationship. The current study aimed to qualitatively explore how patients with DS understand and experience self-compassion, with a view to obtain a better understanding about patients' perceptions of potential barriers, as well as facilitators, to being self-compassionate.

Due to Covid-19 pandemic, the study was suspended in March 2020 and subsequently terminated before recruitment and data collection was completed. The following chapter presents the rationale and intended methods to document the work undertaken until the termination of the project.

Keywords: Dissociative Seizures, Functional Neurological Disorders, Self-Compassion

2.2 Introduction

Dissociative Seizures (DS) are paroxysmal incidents which resemble epileptic seizures, but without the associated epileptic activity in the brain (Reuber, 2008). Other terms, such as ‘non-epileptic seizures’, ‘non-epileptic attack disorder’ or ‘psychogenic non-epileptic seizures’, are also used when referring to this presentation. Even though these terms have at times been interchangeably used, the semantic nuances between different labels can have an impact on the way the presentation is conceptualised (Schmutz, 2013). During this project, DS has been chosen as the preferred term since it is suggestive of a positive diagnosis and conveys a mechanism of action (dissociation) for the presentation.

It is estimated that around 12% of adults presenting to epilepsy clinics present with dissociative seizures (Angus-Leppan, 2008), with one prevalence study reporting 4.9 cases per 100 000 individuals each year (Duncan, Razvi & Mulhern, 2011). Comorbidity of dissociative and epileptic seizures is not uncommon. A recent retrospective case review study reported co-existence ratio between epilepsy and DS to be 53.69% (Yon et al. 2020). In earlier studies, the prevalence ratio was reported to have a range between 3.6% and 58% across different studies (El-Naggar et al. 2017).

A positive diagnosis of dissociative seizures (rather than a diagnosis of exclusion) is an important first step in treatment, where the diagnosing clinician can build a rapport with the patient, sensitively communicate the diagnosis, provide information and psychoeducation about the condition, give advice about self-help techniques (such as distraction or grounding) and discuss needs for further input and review options (Stone, 2016). While for some patients, diagnosis can

lead to a resolution of symptoms without need for further intervention, for a significant portion of patients, symptoms follow a chronic course (Thaller et al., 2016). Acceptance of diagnosis is considered an important factor for better prognosis (Duncan, Graham & Oto, 2014).

Receiving and living with a diagnosis of DS can be a difficult experience for patients. Patients face an increased risk of emergency medical responses, hospital admissions and prescription of anti-epileptic medication, which can be distressing, create confusion about the diagnosis and cause iatrogenic harm (Reuber & Elger, 2003). Patients can experience stigma for not only having a seizure disorder but also because mental health is perceived as the cause of the seizures; leading to feelings of low self-worth, self-critical thoughts and embarrassment about their condition (Rawlings et al. 2017). For some patients, the diagnosis come as a relief (as it rules out organic brain disorder), however difficulties in creating a personal narrative around the diagnosis may lead to difficulties in acceptance of diagnosis, which can impact on engagement with further treatments offered (Thompson et al. 2009).

2.2.1 Psychological Understanding of Dissociative Seizures

Throughout the history, conceptualisations of Functional Neurological Disorders swung between psychiatric and biological perspectives, owing to the dualistic split between Neurology and Psychiatry (Stone, 2016). Borrowing from conceptualisations of hysteria, DS were initially proposed to represent the breakthrough of dissociated memories or mental functions (belonging to a trauma) in the form of a seizure, with limited conscious awareness (Bowman, 2006). In another account, DS were considered as a defensive response, serving the function of communicating distress, surpassing the need to identify and to communicate the emotional distress verbally (as cited in Brown & Reuber, 2016).

Some suggested that acute arousal of parasympathetic system leads to panic-like symptoms which are dissociated from the emotional experience of anxiety (“panic without panic”, Goldstein & Mellers, 2006). According to this model, patients experience an acute detachment and a dissociative state characterised by depersonalisation/derealisation and emotional numbing. Operant conditioning (through positive and negative reinforcement) was suggested play a role in the maintenance of DS, because the seizures could result in intrinsic or extrinsic beneficial outcomes (Sirven & Glosser, 1998).

Brown and Reuber (2016) point out that the above theories about DS are fragmented and fail to provide an account for the heterogeneity of the presentations observed in DS. Their Integrative Cognitive Model (ICM, 2016) incorporates the existing models to understand mechanisms of processes that lead to and maintain DS. Activation of a ‘Seizure Scaffold’, which represents patients’ prior experiences, expectations and behavioural tendencies, coupled with poor inhibitory processes is thought to lead to the DS. The model acknowledges the role of increased threat vigilance and arousal in the anticipation of seizures, as well as activation of parasympathetic nervous system following the seizures which removes the discomfort of the prodromal feelings and thus contributes to a maintaining cycle.

While the model provides a thorough account of biopsychosocial processes which may account to patients’ experiences (and therefore helpful in its use for therapeutic formulation), it is acknowledged that further hypothesis driven research with large sample sizes is needed to test the model and its accountability of the heterogeneity of DS patients (Brown & Reuber, 2016).

2.2.2 Effectiveness of Psychological Interventions on Dissociative Seizures

The current clinical guidelines suggest that clinicians should consider onward referral to psychological services when diagnosing DS (NICE, 2012). However the evidence base for the effectiveness of psychological interventions for DS is still in its early days. A meta-analysis (Carlson & Perry, 2017) highlighted some evidence for seizure reduction following a range of different psychological interventions (including cognitive behavioural, psychodynamic, interpersonal, mindfulness-based, psychotherapeutic, or psychoeducational interventions). However their findings pointed out for the need for more robust and better controlled intervention studies to be able to draw conclusions about treatment effectiveness.

A recent randomised controlled trial (CODES Trial, Goldstein et al. 2020) has found that there was no significant reduction in monthly seizure frequency of patients with DS at 12 months following Cognitive Behavioural Therapy (CBT) and standardised medical care. However the results suggested that compared to the control condition, patients who received CBT experienced improved psychosocial functioning, better health-related quality of life, reduced psychological distress and less symptom burden following the intervention. These results highlight that patients' relationship with their condition can be improved and better psychological outcomes can be achieved irrespective of whether seizure reduction takes place. Consistent with some of the third-wave cognitive behavioural approaches, this is important in creating a shift towards better living with chronic conditions, rather than aiming for symptom elimination.

2.2.3 Compassion and Dissociative Seizures

There are different conceptualisations of compassion. In this study, compassion was considered through Gilbert's conceptualisation, which refers to compassion as the ability to show sensitivity

to suffering and motivation to work towards relieving suffering (Gilbert 2010). It is thought that compassion has developed throughout evolution and enabled humans to regulate difficult emotions such as anger, anxiety and disgust by providing sense of security, safeness and affiliation. Being self-compassionate means that a person can recognise their own distress and take a warm, non-judgemental and compassionate stance to alleviate and prevent their distress. It enables individuals to have a more positive relationship to themselves, especially when they experience difficult emotions as a result of being self-critical or when they experience shame or guilt (Gilbert & Irons, 2005; Gilbert, 2009).

Despite differences in conceptualisations of compassion, it is generally thought to be an important and positive factor in well-being. Self-compassion has positive associations to mental well-being (Neff & Costigan, 2014) and life satisfaction (Yang, Zhang & Kou, 2016). A more self-compassionate stance is negatively associated to psychopathology (MacBeth & Gumley, 2012) as well as rumination and self-criticism (Neff, Kirkpatrick & Rude, 2007). Self-compassion is thought to play a role in improving self-regulation by reducing defensiveness, self-blame and emotional distress, thus positively impacting on patients' illness related behaviours and adherence to recommendations by healthcare teams (Terry & Leary, 2011). A series of studies by Terry et al. (2013) showed that self-compassionate individuals expressed less negative affect about their illnesses. Furthermore, a more self-compassionate stance is thought to enable individuals to seek help about their mental health by protecting them from perceived stigma from others (Heath et al. 2018). It can also facilitate positive change by increasing awareness of self-critical attitudes and may motivate individuals to maintain better self-care (van Ravesteijn et al., 2014). Similar findings have also been reported in psychosis literature where self-compassion

was identified as an important factor for promoting empowerment, growth and recovery (Waite, Knight & Lee, 2015).

While self-compassion is attracting more attention across a range of disciplines and patient populations, it is still under-researched with patients who experience DS or indeed with patients who experience other functional neurological symptoms. Previous research has highlighted that patients with DS experience feelings of low self-worth, shame, perceived stigma and distress as part of their experiences with DS (Rawlings et al. 2017). Furthermore, patients with DS were shown to have an increased attentional bias towards threat vigilance and increased cortisol response (Bakvis, Spinhoven & Roelofs, 2009). These findings are relevant to the conceptualisation of self-compassion and compassion-focused interventions for this patient population.

In line with the commitment set out in the Neurological Care and Support Framework for Action guidelines (Scottish Government, 2019), the current study aimed to qualitatively explore patients' understanding and experiences of self-compassion, in the context of their DS diagnosis. The research questions were:

- 1) What does self-compassion mean to patients who experience DS?
- 2) What barriers and facilitators do patients perceive which may prevent or facilitate taking a more self-compassionate stance?

2.3 Method

2.3.1 Participants

The study aimed to recruit 12-15 participants who had a recent diagnosis of DS, through consecutive sampling. This sample size was estimated to provide a good basis to explore participants' experiences with self-compassion. However it was recognized that more recruitment may be needed to reach theoretical saturation if time restrictions allowed.

Participants were considered eligible for the study based on the following criteria:

- Having a positive diagnosis of a “Dissociative Seizures” from a Consultant Neurologist, as fully or partially explaining the participants' symptoms. The diagnosing clinician would be “confident” or “very confident” in the diagnosis.
- Being above the age of 16 and willing to participate in research
- Having a fluent command of the English language.

Participants were not considered eligible if they were unable to provide consent, if they had a diagnosis of Intellectual Disability or other known significant cognitive impairment. Other health comorbidities were not part of the exclusion criteria. Participants who experienced both epileptic and dissociative seizures were considered eligible, if the DS was the predominant part of their presentation (This would be discussed with the diagnosing clinician). There was no requirement for seizures to be captured on videotelemetry, as long as the diagnosing clinician felt confident that the DS diagnosis explained the patients' presentation.

Data collection commenced in October 2019. Following the Covid-19 outbreak, the study was initially suspended as per the instructions from the research Sponsor. A decision was made to not apply for the lifting of suspension due to reasons outlined below (See Termination of Study section) and the study was terminated. During the data collection period seven eligible participants showed interest in the study. Out of these, one participant completed the study. Three participants had given verbal consent to take part in a telephone interview and were awaiting the written consent form in the post when the study suspension was announced. These three participants were informed about the termination of the study and further data collection did not take place.

2.3.2 Design

A Constructivist Grounded Theory (Charmaz, 2014) approach was considered for the analysis and interpretation of the interview data. This is because the research questions aimed to construct an understanding of participants' experiences with self-compassion within the context of their diagnosis and the health services. Through the interviews, the aim was to theorise about participants' perceived facilitators and barriers to self-compassion and to compare the emerging theory to existing psychological models about self-compassion. For these reasons, other qualitative approaches which are also interested in human experiences (such as phenomenology) were considered not suitable for the research aims.

2.3.3 Ethical Approval

Ethical approval for the study was granted by the South East Scotland Research Ethics Committee (REC Reference Number: 19/SS/0064) and NHS Lothian Research Governance & Management Team. Appendix C presents the ethical approval letters.

2.3.4 Procedure

Figure 2.1 details the recruitment and data collection procedures. Eligible participants were identified by Consultant Neurologists or Registrars through their outpatient clinics, following the confirmation of diagnosis. Eligible participants were approached by their doctors, provided with the Participant Information Sheet (see Appendix D) and invited to take part in the study. Those who showed interest and gave verbal consent for their details to be passed on to the Principal Investigator were contacted to discuss the study. A suitable interview date and time were arranged with those who wished to take part.

Participants were able to choose between a face-to-face or a telephone interview (as part of the original study protocol). It was thought that the telephone interviews would make the study more accessible to participants with travel limitations. If participants chose to have a telephone interview, consent forms (see Appendix D) were sent out in the post with stamped addressed envelopes to be returned to the Principal Investigator. Phone interview dates were arranged only after written consent was obtained. All participants were aware of their right to withdraw from the study at any point without any penalties or impact to the health care they received.

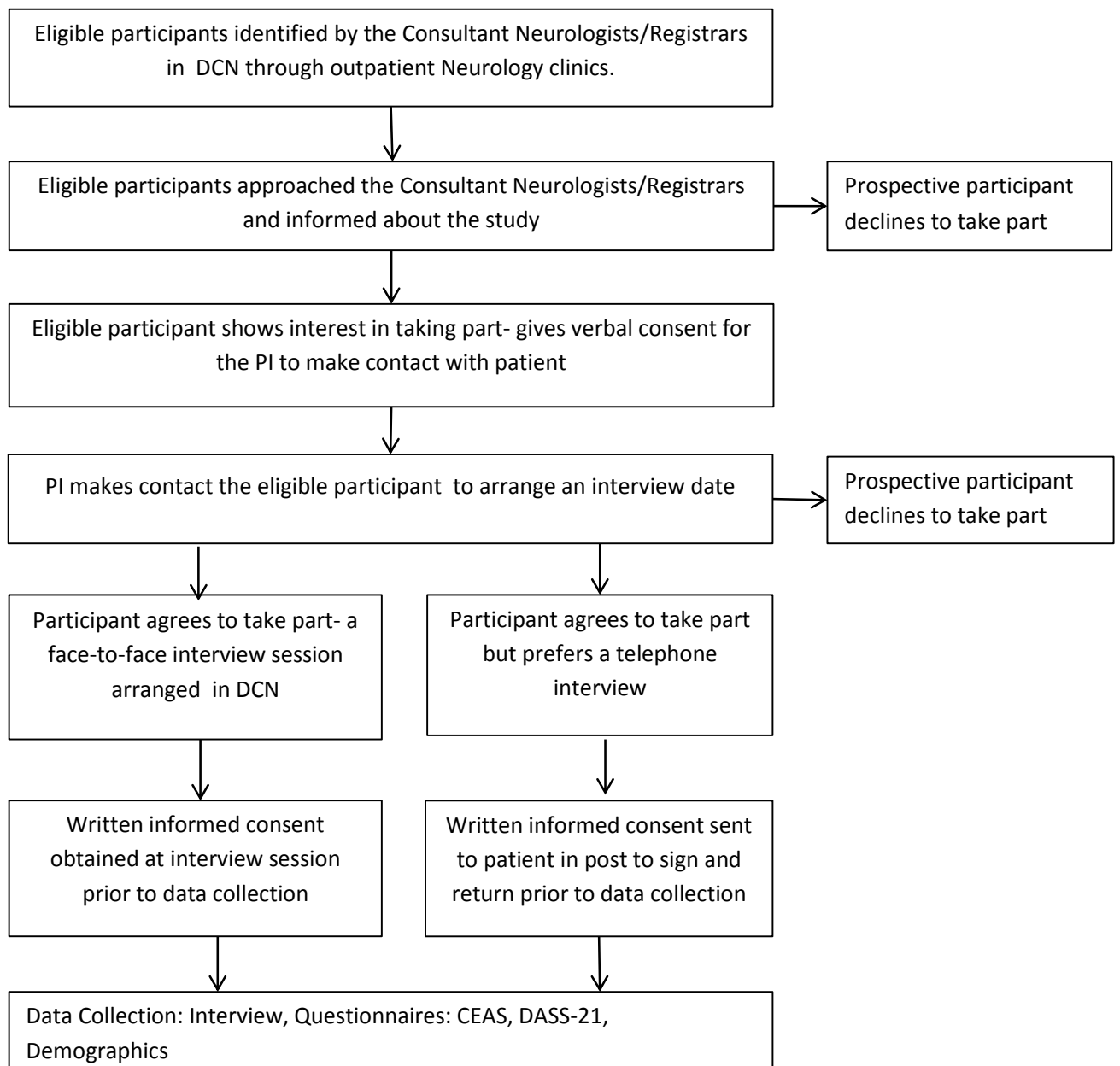


Figure 2.1 Procedure Flowchart

DCN: Department of Clinical Neurosciences; PI: Principal Investigator, CEAS: Compassionate Engagement and Action Scale, DASS-21: Depression, Anxiety and Stress Scale.

2.3.5 Interviews

Qualitative data was gathered through semi-structured interviews. An interview schedule was developed based on existing literature, such as qualitative research exploring compassion in a range of clinical samples (Waite, Knight & Lee, 2015; Lawrence & Lee, 2013; Pauley & MacPherson, 2010) and research exploring individuals' experiences of living with dissociative seizures (Rawlings & Reuber, 2016; Rawlings et al. 2017). Appendix E presents the questions the interview schedule covered. The questions were broad and open-ended to enable rich discussion of participants' experiences. Initial questions focused on getting to know the participant in the context of their diagnosis and to ease them into discussing subjects that may be more personal. While the interview schedule guided the flow of discussion, there was also flexibility to allow participants to discuss other relevant issues which the interview schedule may not have covered.

A portion of participants would also be consulted at the end of their interviews regarding their thoughts and comments about the interview questions. This would form the basis of a feedback which would contribute to the iterative formulation of research questions within Grounded Theory and help shape the course of inquiry in subsequent interviews. Participants would also be consulted for their feedback on the emergent themes from their interviews, as a means of obtaining respondent validation.

In addition to the interviews, participants would be asked to complete two questionnaires to provide more information about their experiences with self-compassion and mood:

- 1) **The Compassionate Engagement and Action Scale - Self-Compassion version (Gilbert et al. 2017):** This self-report measure was developed in accordance with Gilbert's

evolutionary motivational approach to compassion. The scale consists of three separate orientations to compassion: compassion to self, compassion to others and compassion from others. In the current study, only the self-compassion version was used. The respondents are asked to rate statements about self-compassion on a 1-10 Likert scale (ranging from never-always). The questionnaire has two sections: The first set of questions include questions on the respondents' motivation and ability to engage with distress. The second set inquires about the respondents' ability to act in response to and alleviate their distress.

This is a newly developed scale and its validity and reliability has been established with British, American and Portuguese samples, with a reported convergent validity $\alpha = .74$ for engagement and $\alpha = .89$ for action sections of the self-compassion subscale (Gilbert et al. 2017). Further studies also established the scales psychometric properties in normal population based samples in Britain (Lindsey, 2017) and in Netherlands (Kleissen, 2016). Validation of the scale with clinical samples is still in progress. Considering the exploratory nature of the current study, it was thought to be an appropriate and theoretically congruent tool to further describe the experiences of participants' self-compassion.

2) Depression, Anxiety and Stress Scale – 21 items (DASS- 21; Lovibond & Lovibond, 1995): This is a 21 item scale which measures self-reported levels of depression, anxiety and stress. Its validity and reliability has been established with both non-clinical samples (Henry & Crawford, 2005) and clinical samples (Sukantarat, Williamson, & Brett, 2007; Ronk et al. 2013). This measure would help obtain a more objective measure on participants' mood which would be important to take into consideration during the analysis.

In addition to these questionnaires, participants would be asked to complete a demographic information sheet to gather more information about their age, sex, years of education and number of years since the onset of symptoms. With participants' consent, contact details of their GPs would be obtained, to inform them regarding their patients' participation. Appendix F presents a copy of the questionnaires used as part of data collection.

2.4 Termination of Study

Unfortunately, due to Covid19 outbreak the project was suspended. An application could have been made to lift the suspension and continue with data collection remotely (through telephone interviews). However a decision was made to terminate the study due to following reasons:

1) It was expected that lifting of suspensions would take some time for non-Covid studies due to additional time demands research would make within clinical settings (e.g. for clinicians), even if remote data collection was possible. Considering the time-frame available for the submission of the doctoral thesis, further delays in recruitment would make the project unviable.

2) The lockdown measures indicated a significant change in context and this was believed to potentially impact on the validity and transferability of the data collected. Since the study aimed to explore participants' self-to-self relationship in the context of their diagnosis, significant changes in life-circumstances due to the lockdown (and its consequences such as changes in daily life, employment status, family relations) was believed to be a significant change of context that would affect the interview data. The changes in circumstances could also create a change in participants' priorities in taking part in research in the first place as well.

3) It was thought that during the stressful and uncertain times of a lockdown, participants could experience more significant distress unrelated to the study itself. This could impact on the researcher's interpretation of the research data. Furthermore, the potential increase in participant distress was also important to consider from a risk-management perspective, where services to

which participants would be signposted to could have changed, become unavailable or inappropriate under the changing circumstances.

4) With the non-urgent healthcare services moving away from face-to-face patient contact, there was some uncertainty around how long the existing route of recruitment could continue. Even though the recruiting clinicians had indicated their willingness for ongoing recruitment around March for as long as possible, the uncertainty around future clinical activity posed risk for completing the recruitment in time for the completion of the thesis project.

Following the decision to terminate the study, three participants who had verbally consented to take part in the study were contacted and informed of the termination of the study. One participant who took part in data collection was also contacted, informed that the data would not be analysed further and thanked for participation. The data collected was treated in accordance with the ethical approval: The recorded interview was anonymously transcribed and audio recording subsequently deleted as per ethical approval protocols.

2.4.1 Reflections

Throughout the design and implementation of this project, there has been a number of unexpected and significant barriers along the way. While it was disappointing to not be able to conclude the study, the project itself was an immense learning opportunity in managing unexpected changes, working with collaborators and clinicians, as well as safeguarding data validity and meaning.

I did not have an experience working clinically with patients experiencing DS, until after the termination of the study. Shortly after wards, I had this opportunity. This enabled me to reflect further on how the current study could be improved for the future.

The current design was based on one-off interviews with participants. Now that I have had the opportunity of working clinically with patients, I can recognize the benefit of working with people over a number of sessions as this creates a stronger rapport and enables richer information during interviews. Compassion can be a difficult conversation for participants, not only due to its emotional components, but also because within the society it is a less readily discussed concept and people may need time and space to reflect on their experiences and to find best ways of expressing these. Therefore future research designs may consider meeting individuals multiple times ahead of the interview session to build rapport or considering multiple interview sessions.

It was important for me that the study was accessible to all eligible participants. Telephone interviews (even prior to lockdown conditions) were a favoured option by prospective participants because accessing the hospital at times meant lengthy trips on public transport. It is possible to consider home visits or visit within a community space in future study designs.

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3 Reanalysis of Existing Data on Perceived Benefits, Barriers and Solutions to Accessing Greenspaces in Deprived Communities

Manuscript prepared for submission to Environment and Behaviour
(Submission guidelines are presented in Appendix G)

Word Count: 9984

3.1 Abstract

Greenspaces are known to have physical and psychological well-being effects. Especially in deprived communities greenspaces are thought to have an “equigenic” effect whereby engagement with greenspaces minimise health-related inequalities. Despite these benefits individuals from deprived communities are less likely to engage with greenspaces.

A previous MSc project aimed to find out views of individuals from deprived communities, in relation to what benefits and barriers they perceive and what solutions they propose for better engagement with greenspaces. The current study is a secondary analysis of existing data with the aim to inform future interventions to facilitate engagement. Interview scripts from eleven participants were analysed using a constructivist Grounded Theory approach.

The analysis resulted in eight themes relating to benefits, ten themes relating to barriers and eight themes of proposed solutions. Current results focused on more novel themes and themes relating to internal factors. For the benefits the chosen themes were “Impact on mental health and well being” and “Social connectedness”. For barriers the themes were “Psychological barriers”, “Time pressures”, “Perceptions about greenspaces” and “Availability of technology”. Proposed solutions included “Raising awareness about benefits of greenspaces”, “Organising events and activities” and “Showing willingness to engage with greenspaces”.

Selected themes highlight the importance of internal benefits and barriers to engagement with greenspaces as well as factors relating to the community and social connectedness. These are discussed in relation to existing literature to inform future intervention studies.

Keywords: Greenspaces, Grounded Theory, Engagement, Health Inequalities

3.2 Introduction

Greenspace is an umbrella term that refers to areas of vegetation, such as parks, fields, meadows, woods, forests and other ecosystems (World Health Organisation, 2017). There has been increasing interest in the research of greenspaces across disciplines including social care, psychology, healthcare and medicine, ecology and many other fields, creating a growing but fragmented evidence base (Taylor and Hochuli, 2017).

Studies show that living near greenspaces have a positive impact on physical health (DeVries et al., 2003; Maas et al., 2006) and mental health (van den Berg et al., 2015; Wood et al., 2017; Houlden et al., 2018). Greenspaces have salutogenic effects, such as regeneration of attention (Kaplan, 1984) and reduction in stress and cortisol levels (Ulrich et al. 1991). The impact of greenspaces on well-being is complex and the need to consider moderating and mediating factors within a theoretical framework has previously been highlighted (Lachowycz, & Jones, 2013).

Income inequality and socioeconomic status are recognised as important factors when considering the impact of greenspaces. Prevalence of common diseases were shown to be lower in areas near greenspaces, even when socio-economic factors were controlled for, suggesting an intrinsic health benefit of green spaces (Maas et al. 2009). Furthermore, greenspaces were shown to predict better mental health outcomes, particularly for those individuals coming from deprived communities, despite such benefits not being observed for communities of higher socio-economic status (Mitchell, Richardson, Shortt & Pearce, 2015). Individuals from more deprived areas may experience particular health benefits from accessing greenspaces, which could reduce health-related inequalities (Mitchell & Popham, 2008).

This suggests that greenspaces can have an equigenic effect, whereby exposure and access can serve to reduce existing health-related inequalities (Mitchell, 2013). However, despite the potential benefits that greenspaces might offer in facilitating resilience and reducing existing inequalities, individuals from lower socio-economic backgrounds are less likely to access and engage with greenspaces (Burt, Stewart, Preston & Costley, 2013). Therefore, interventions for facilitating better engagement with greenspaces for this socio-economic group could provide relatively low cost means of minimizing health inequalities and improving community physical and mental health.

A previous MSc project in 2018 aimed to explore the perspectives of individuals from low socio-economic backgrounds, regarding their engagement with greenspaces. Qualitative interview data were collected from 12 individuals across two deprived areas of Edinburgh. The study aimed to explore participants' experiences and thoughts in relation to benefits, barriers and proposed solutions for greenspace access, with a view to inform interventions that could facilitate better greenspace engagement within these communities. The three members of the original research team conducted analyses and discussed their findings separately in their respective MSc theses. All members of the research team identified improvements in mental and physical health and social cohesion as important benefits of engagement with greenspaces. Furthermore, there was shared consensus on the impact of bad weather, poor accessibility, low quality and poor maintenance as barriers to engagement.

There was also divergence across the findings: One researcher reported benefits such as "Connection to nature" and "Escaping urban stressors" which did not emerge as separate themes in other analyses (McGovern, 2018). Two researchers identified lack of motivation as a barrier to

engagement (Burke, 2018; McGovern, 2018), however in Burke's analysis, this was also connected to prioritization of engagement. The third analysis (Robertson, 2018) reported additional barrier themes, such as lack of interest, lack of entertainment and time constraints, which did not emerge as stand-alone themes in other's analyses. With respect to solutions, organization of activities in greenspaces, improved access and community involvement were three areas highlighted in Robertson's analysis. These were not mirrored in McGovern's results whereby the emerging solution themes related to poor weather, quality and safety of greenspaces and organisation of activities. The only solution discussed by Burke related to increasing awareness about the benefits of greenspaces to facilitate engagement.

The prior analyses were carried out using Thematic Analysis (Braun & Clark, 2006), however each researcher followed a different approach to analysis. For instance, one analysis included only the dominant themes (with a representation rate of 70% or more) and the proposed solutions were only included if they were relevant to the barrier themes discussed (McGovern, 2018). The second researcher maintained a wider limit of inclusion for each theme and identified most number of barriers and solutions across the research team (Robertson, 2018). The final researcher followed a realist perspective to the thematic analysis and combined the analysis for benefits, barriers and solutions to engagement under the umbrella of six parent themes rather than considering them separately (Burke, 2018). The differences of approach to data analysis likely contributed to the divergence of themes and varying conceptualisations of the dataset.

Considering the above factors, the current study was designed as a secondary analysis of the existing interview data with individuals from a deprived area of community. Using a constructivist Grounded Theory approach (Charmaz, 2014) the aim of the secondary analysis was

to further explore the themes pertaining to the perceived benefits and barriers to greenspace use and the solutions to facilitate engagement with greenspaces within a low socio-economic community. The research questions were as follows:

1. What are the perceived benefits and barriers to spending time in greenspaces for residents of deprived communities in Edinburgh?
2. What solutions do these residents suggest to facilitate and increase greenspace use?

Considering the desire to inform discussions on future interventions, the current analysis aimed to explore themes relating to benefits, barriers and solutions separately. External and environmental factors (such as accessibility, maintenance, security and littering) are well discussed within the literature in relation to deprived communities' engagement with greenspaces (Hoffmann, Barros & Ribeiro, 2017; Cronin-de-Chavez, Islam & McEachan, 2019). These factors were also well discussed by the prior MSc research team. Therefore the secondary analysis aimed to focus the discussion on less frequently discussed and internal factors impacting on greenspace use where possible to add to existing discourse.

3.3 Methods

3.3.1 Ethical Approval

Ethical approval for the re-analysis of the existing interview data was granted by the University of Edinburgh Ethics Committee. The approval letter is presented in Appendix H.

3.3.2 Design

This is a qualitative research project. The original research team had chosen Braun and Clarke's (2006) thematic analysis as their preferred method of analysis. However in the current secondary analysis, a constructivist Grounded Theory approach (Charmaz, 2014) was followed, as an inductive and data-driven approach would be suitable in understanding this participant groups' experiences of engaging with greenspaces. It was felt that in a closed dataset (where further recruitment was not possible), Grounded Theory could allow for a better representation of relevant themes which might be voiced by fewer number of participants. It was also felt that this approach could lead to the emergence of a fresh and different perspective compared to the existing analyses of the same dataset.

3.3.3 Participants & Recruitment

Participants were recruited by the original research team. Recruitment took place across two pre-selected communities, which had an overall deprivation of less than or equal to 5th decile and housing deprivation of less than or equal to 3rd decile, as measured by the Scottish Index of Multiple Deprivation (SIMD, 2016). Data collection was completed in two communities (named A and B), across four data zones. Table 3.1 presents the deprivation scores for each zone. Both

communities were situated within one mile of greenspaces, of comparable size and descriptions. This helped minimize the potential confound of proximity and accessibility of greenspaces.

Table 3.1 Overall Deprivation and Housing Deprivation SIMD Scores across data zones

	SIMD Overall Deprivation	SIMD Housing Deprivation	Population
Community A zone 1	Decile 2	Decile 1	995
Community B zone 1	Decile 1	Decile 2	1054
Community B zone 2	Decile 1	Decile 3	511
Community B zone 3	Decile 1	Decile 2	914

To be considered eligible, participants had to be between 18-65 years of age and able to travel one mile unassisted by someone else (by foot or using a mobility aid). This helped minimize accessibility barriers in engaging with greenspaces. Participants were also required to have a disposable household income no higher than the £21,001-32,676 income bracket (based on the National Office of Statistics' figures for the UK household mean). No more than half of the participants from each community held or were pursuing degree-level qualifications at the time of interviews. Participants were required to have a good command of the English language to be considered eligible.

Recruitment took place via postal drops of invitation letters at randomly selected addresses, which were determined by the Royal Mail's postcode finder. These were hand delivered to all eligible addresses in Community A and two data zones in Community B. Due to a shortage of recruitment, a further wave of invitations were randomly delivered to 167 addresses within a third data zone in Community B. Additionally, posters were placed within communal areas and businesses within local communities to attract interest in the study. Online posters were circulated within community public Facebook groups.

Eligible participants were asked to express interest via e-mail (invitation letters informed participants that computer and internet access were available through libraries). Participants who expressed interest were asked to complete an online screening questionnaire to gather demographic information and fully assess their eligibility for the study. Participants who took part were awarded £5 for their participation.

3.3.4 Interviews

Semi-structured interviews were conducted face to face by the three members of the original research team. An interview schedule was developed to maintain a similar style of inquiry across the interviews. The questions were piloted with colleagues prior to data collection. Five broad questions were asked during the interviews:

- “Can you tell me a little about how you use green spaces in Edinburgh, if at all?”
- “What do you think, if any, are the benefits of spending time in green spaces?”
- “What are the barriers that prevent you spending more time in green spaces?”
- “What do you think could be potential solutions to the barriers we’ve discussed?”
- “Is there anything else you would add to a discussion of green spaces?”

The schedule aimed to ease participants into conversation and to build rapport. Appendix I presents the interview schedule and suggested prompts for each question (as previously reported by the MSc research team). Interviews lasted around one hour and were recorded digitally on Dictaphones. Transcription was completed verbatim, taking into consideration participants’ dialect, tone of voice, and pauses.

3.3.5 Procedure for secondary analysis

The transcribed interview scripts were already anonymised as part of the original data analysis. However, prior to re-analysis the scripts were reviewed again by the researcher and the academic supervisor for potential identifier information. Place names which could compromise anonymity were redacted by the academic supervisor (denoted by <R> in the transcripts), before the scripts were transferred to the researcher for re-analysis. Upon receipt, the transcripts were reviewed again for potential identifiers, however no further identifiable information was observed during the initial readings.

3.3.6 Analysis and Reflexivity

The researcher refrained from reading background literature and the original research teams' findings prior to commencement of the secondary analysis. This was so as not to create potential confound and bias within the emerging themes. Each interview script was read a number of times from start to finish, creating familiarity with the data, before initial coding was commenced.

NVivo12 was used to complete the analysis. Comments or questions which were perceived to be leading were omitted from analysis. Initial coding was completed within two weeks, which was followed by two iterations of focused coding. Prior to concluding the analysis, themes which emerged from focused coding were considered within the context of prior literature. While this could have introduced some potential bias, it was thought that considering the literature at the later stages of analysis would minimize this risk, while helping with identification of relevant and novel themes within the context of existing knowledge.

Considering the research aims and the limitations of a complete dataset, a balance was sought between evaluating themes that were well grounded in data, while still being inclusive of relevant themes expressed by fewer participants.

Since this was an already complete dataset without any opportunity to gather more data, it was not possible to use the grounded theory approach in an iterative way to inform data analysis and theory building. In order to examine possible sources of researcher bias, a reflective diary was kept throughout the analysis, noting experiences felt after reading and coding the interviews. This was aimed to help the meaning making process, since the interview scripts were the only source of information regarding the interviews and the interviewees. This reflective practice helped address the potential impact hidden or pre-conceived assumptions could have on the coding process. For instance, when one of the participants disclosed their own disability and wheelchair use, the researcher used the reflective process to question whether the constructed codes were adequately representing the participants' lived experience or whether they fit with the researchers pre-conceived ideas about accessibility, living with disability and participation in community. The reflective process also helped consider assumptions about what makes a community, especially when exploring participants views who were students and who had lived abroad prior to becoming part of the communities in their respective neighbourhoods. The constant comparative method was used throughout to guide the analysis and to ensure that emerging themes were well-grounded in data across the dataset.

3.4 Results

The original research team recruited 12 participants in total. One of the participants had a higher annual income than set out in the eligibility criteria and thus this interview script was omitted from analysis. Table 1 shows participants' demographic information. All participants were from a White British background except for one (Participant 4) who identified as belonging to a "Mixed (Other)" background.

Table 3.2 Participant demographics

Participant	Area	Gender	Age	Highest level of education	Employment Status	Annual Income (£)
1	2	Female	46-55	BA/BSc/equivalent degree or higher	Self-employed	0-21,000
2	2	Female	46-55	BA/BSc/equivalent degree or higher	Employed (full-time)	21,001-32,676
3	1	Female	46-55	Secondary school qualifications	Employed (part-time)	0-21,000
4	1	Female	18-25	BA/BSc/equivalent degree or higher	Self-employed	21,001-32,676
5	2	Male	26-35	BA/BSc/equivalent degree or higher	Student	0-21,000
6	2	Male	56-65	Apprenticeship, vocational course, diploma, or other	Unemployed	0-21,000
7	1	Female	36-45	BA/BSc/equivalent degree or higher	Student	0-21,000
8	1	Male	18-25	Secondary school qualifications	Unemployed	0-21,000
9	2	Male	46-55	Secondary school qualifications	Unemployed	0-21,000
10	1	Male	26-35	BA/BSc/equivalent degree or higher	Employed (full-time)	0-21,000
11	1	Male	26-35	Secondary school qualifications	Unemployed	0-21,000

3.4.1 Coding and Main Themes

The analysis aimed to explore emerging themes for benefits, barriers and solutions to engaging with greenspaces separately. Initial readings of the interview scripts did not highlight significant differences of viewpoints between participants from the two recruitment areas. Therefore the analysis was completed on the whole dataset, without any regional comparisons.

Initial coding produced 194 codes, which through two iterations of focused coding, were refined into 8 themes relating to benefits of engaging with greenspaces, 10 themes relating to barriers to engagement and 8 themes of proposed solutions. Table 3.3 presents the broad range of themes that have emerged from analysis. The range of emergent themes and supporting quotes are presented in Appendix J for information and transparency.

Some of the emerging themes are well known within the greenspaces literature (e.g., external factors like accessibility and distance, impact of bad weather on engagement, the need for well-maintained greenspaces or impact of greenspaces on physical health.). Results presented below aimed to focus on aspects of the analysis which were less well-covered themes that could contribute to discussions about future interventions for facilitating engagement with greenspaces, particularly focusing on themes relating to internal factors.

For benefits of engaging with greenspaces, the themes chosen for discussion were “Positive Impact on Mental Health and Well-being” and “Social Connectedness”. For barriers, the chosen themes were “Psychological Barriers”, “Time Pressures”, “Greenspaces perceived as being ‘boring’” and “Availability of Technology”. For proposed solutions, chosen themes for analysis

were “Organised community events and activities”, “Raising awareness” and “Willingness to Engage with Greenspaces”.

For each theme and subtheme, supportive quotes are presented in relevant tables. When presenting participant quotes, interviewers’ clarifying questions or comments were redacted (indicated with “[...]”) for purposes of brevity, if the omission was considered to not significantly change the meaning of the script.

Table 3.3 Emerging themes for the benefits, barriers and proposed solutions to engaging with greenspaces

Benefits	Barriers	Solutions
<ul style="list-style-type: none"> Positive Impact on Mental Health and Well-being 	<ul style="list-style-type: none"> Greenspaces perceived as being boring 	<ul style="list-style-type: none"> Organised community events and activities
<ul style="list-style-type: none"> Exercise and better physical health 	<ul style="list-style-type: none"> Lack of Facilities 	<ul style="list-style-type: none"> Better kept spaces
<ul style="list-style-type: none"> Space for Learning 	<ul style="list-style-type: none"> Bad Weather 	<ul style="list-style-type: none"> Increasing Security and Safety
<ul style="list-style-type: none"> Social Connectedness 	<ul style="list-style-type: none"> Poor Maintenance of Greenspaces 	<ul style="list-style-type: none"> Fight with littering
<ul style="list-style-type: none"> Sense of freedom in Greenspaces 	<ul style="list-style-type: none"> Time Pressures 	<ul style="list-style-type: none"> Improving accessibility
<ul style="list-style-type: none"> Access to fresh produce 	<ul style="list-style-type: none"> Psychological Barriers 	<ul style="list-style-type: none"> Investment is beyond funding
<ul style="list-style-type: none"> Green spaces as safety 	<ul style="list-style-type: none"> Safety and Security Concerns 	<ul style="list-style-type: none"> Raising awareness
<ul style="list-style-type: none"> Away from pollution 	<ul style="list-style-type: none"> Accessibility of Green Spaces 	<ul style="list-style-type: none"> Willingness to Engage with Greenspaces
	<ul style="list-style-type: none"> Service Provision and Investment 	
	<ul style="list-style-type: none"> Availability of technology 	

3.4.2 Benefits of spending time in greenspaces:

3.4.2.1 Positive impact on mental health and well-being:

This theme consisted of three inter-related subthemes. Firstly, the majority of the participants recognised that engaging with greenspaces had a positive impact on their mental health; they reflected on feeling better within themselves after going for a walk or spending time in a greenspace. Greenspaces were described as having relaxing qualities, where participants attended greenspaces with the intention of relaxing or calming themselves down. The calming atmosphere in greenspaces was reported to facilitate present moment awareness, where some participants enjoyed mindful observation of their surroundings and the nature.

Table 3.4 Subthemes and supportive quotes for the theme “Positive Impact on Mental Health and Well-being”

Positive Impact on Mental Health and Well-being
Positive impact on Mental Health
“Yes. Because you know, if you outside... you, you know you, even if you just uh, say you just take a walk, you know, you- you feel yourself happier, I will say” (Participant 10)
“Emm, I think s'good for me mood as well... ehh... sort of, emm, peace and quiet, so [chuckles], emm... an' time to reflect an' stuff as well an' things... um... and just generally seeing ma dogs out exercising I actually get quite a lot of pleasure from that as well, seeing them enjoying the green spaces too so... ah think it's really beneficial for mental health...” (Participant 2)
“I quite like ta, the one thing about <R Park 4>, when you see it on a sunny day and there's like, you go see people just doing different things. There's cricket goin' on there's football goin' on, and there's people just lying about doing different things and it's... there's a certain amount of, um... utter, clear pleasure in watching all them people sort of enjoying themselves about, like, you know? So, I think that can raise your mood so, uh...” (Participant 6)
Space for relaxation
“Kind of, maybe yeah. Just sort of getting out of my own head. It's nice to just go and sort of clear my head. Um, in the better weather I have even sort of sat and read in the park, for a little bit, or got a coffee or...” (Participant 5)
“Cause it does help me relax and when I want to relax I just don't need anybody else around, anybody I know at least “[chuckles][...] And, also, I sometimes go with my book, if it's nice and sunny and I can sit outside I take my book... and... No, I mostly go when I'm alone because I mostly go to, <i>unwind</i> , so... Yeah...” (Participant 7)

“It just, takes your mind off it an’ helps you relax as well, eh. [...] Well, it helps me relax, don't know about everybody else. [...] Certainly helps me relax anyway.” (Participant 9)

Being in the present moment

“Gets you a chance to relax completely. Cause even... you can go home after work but then you're stuck with... I dunno... cooking and then you turn on some YouTube, or Netflix, or news, so you're getting from your computer screen and then there are some other problems at home, but if you actually spend some time after work in a green space, you get this buffer time or... [...] Uhm, away from those problems and I'm not yet with the other ones so it's a bit of like a... bubble.” (Participant 4)

“Yeah. So sometimes I just need to go and, sort of quiet everything down and- and go and focus and like, you know...sort of look to the horizon. You know when people say that when you get a bit seasick or something, it's a bit like that I guess.” (Participant 5)

“Eh, but when yur down there it's, when you git tae the tap o' the hill an that I have a pair o' binoculars in the house so you can sit and watch, like, the whole o' the countryside. Just a big massive view, eh, so you sit there for hours with a pair ae binoculars, eh.” (Participant 9)

3.4.2.2 Social Connectedness

Greenspaces were described as enhancing feelings of connectedness to others within the community. This seemed to result from seeing others engage with greenspaces on a regular basis and this enhanced the community feel. One participant (Participant 6), described a sense of belonging to the local park (which is where they grew up), despite its shortcomings. Furthermore, greenspaces were described as social places where meeting others and connecting with them were perceived as being easier compared to other social situations. Two participants described a shared sense of values with other greenspace users.

Additionally, greenspaces were described as providing opportunities for being on one's own at the same time as providing opportunities for being in connection with others in the community. This was captured with the subtheme title ‘Solitary Connectedness’. A sense of perceived control was described by two participants where they felt able to choose whether or not they wished to interact with others within the greenspace.

Table 3.6 Subthemes and supportive quotes for the theme “Social Connectedness”

Social connectedness
<u>Connectedness to others in the community</u>
<p>“But it's nice to feel that it's kind of getting used. It feels like there's a community that use a green space. Um, that's something that is quite nice, so... I don't know, sort of where that fits in” (Participant 5)</p>
<p>“I think people, uh, benefits- there's- there's... I'm tryna think of any other benefit's that I've not mentioned. People are a lot more friendly. And they go uh, people are a lot more sociable when they meet each other in a park. You know, and they'll talk to ya, they'll say hello just to a total stranger. If you're walking along the <R Path 2>, you'll say, "G'd morning," "morning." Things like that; that changes as the day goes on. But, eh, if you see a- an individual walking, you're- you're likely to say, "hello," as opposed to ignoring them. So, um, you can see that it sorta, eh, creates a social, um, cohesion” (Participant 6)</p>
<p>“-but I think that it works everywhere like that. And... also I am thinking that, someti- I dunno - somehow I feel very close to people in these spaces.” (Participant 7)</p>
<u>Shared sense of values</u>
<p>“They- they, they'll start... You put on your- your armour, when you're out there (inaudible) because you're... you don't know who the person y'are- in the city is. But, see you recognize a fellow... um, country person. So, you've got something in common cause you're walking in the- you're taking the time to walk out in the path and everythin'. So, you recognize that and eh, I think, why that is, I don't know, I've no idea...” (Participant 6)</p>
<p>“Dya know what I mean? Whereas in green space you're away from it all, like... I wouldn't say away from everyone because obviously there's other people an that there, but you don't mind it. [...] Dya know what I mean? Cause they're not there- cause they're no causing trouble or that. [...] They're just there for the same reason you're probably there.” (Participant 8)</p>
<u>Solitary connectedness</u>
<p>“Erm, like for me it's actually quite nice if you're walking through on like a Saturday afternoon, and are some, like there's like a football match going on or something. Like, as weird as it sounds, having said that I need to get away from people, there's something quite nice about that kind of- feeling like there's something going on? Umm... and it's- it's nice to feel like these spaces kind of get used, even though I can sort of maintain my anonymity and stay sort of at the back and not really get involved.” (Participant 5)</p>
<p>“So, as- even when I'm feeling down I've learned to sort of go out anyway. Em, and become sort eh... part-part of, just part of things without... so parks are good as opposed to just dressing and going to the library, maybe. Or things that're filled with people. You know if somebody talks to you in the library they might be giving you a chat for ages, whereas in- in a park or a green space it's just fleeting contact, so, it's contact without any commitment. [...] So, eh-[...] Um, purely from a- purely from a personal point of view, I think it makes you feel good that someone speaks to ya? Somebody smiles at you, because I- I think that good- goodwill is transferable” (Participant 6)</p>
<p>“Yeah. I think it is ‘cause I see a lot of people just s- sitting on their own. [...] Dya know what I mean, it's, it's like, it's really enjoyable.[...] Sometimes. Just being on your own, sit outside.” (Participant 8)</p>

3.4.3 Barriers to spending time in greenspaces:

3.4.3.1 Psychological Barriers

Most participants recognised lack of motivation as a significant barrier to engaging with greenspaces. One participant conceptualized the reason for lack of motivation in relation to life-stressors such as unemployment and depression. Other participants considered lack of motivation in relation to being lazy. Having a disinterest in greenspaces was also described as a barrier by five participants, even when well publicized activities in greenspaces were available. This disinterest was highlighted as a reason for lack of engagement with such events. One participant discussed that not knowing about the benefits of greenspaces could be a contributing factor preventing engagement. Some participants who sought solitude in greenspaces described deterring their visit to a greenspace if they perceived it to be crowded.

Table 3.7 Subthemes and supportive quotes for the theme “Psychological Barriers”

Psychological Barriers
<u>Lack of motivation</u> “Uhm. Well the first one would probably be laziness. [...] Sometimes it takes a while, takes an effort to get to the place and then if it's a hill then there's some climbing involved and you're, kinda, I'm not prepared to do it now, I don't want to, maybe next time.” (Participant 4) “A lot ae people (exhales)... Don't know about the other areas o' Edinburgh but it's probably mostly the same. A lot ae, a lot ae people roond about <i>here</i> are, are <i>unemployed</i> , an they're, suffered <i>depression</i> , an they've just, no got the motivation.” (Participant 9) “...You <i>have</i> that, you <i>have</i> that, but you know, people don't wanna, people don't <i>care</i> , about that, you know, so they have to find, unfortunately, [coughs] they have to, you know, you can't really motivate them 'cause they have to find that inside of them... 'Cause, you know, they have the chance to do it and it's for free [chuckles] They just not motivated.” (Participant 10)
<u>Lack of interest in engaging with Greenspaces</u> “Well, I dunno if we can do something about it because, no matter how many, you know exciting activities you propose and how many... attractive leaflets you might create or design [laughing] if someone, doesn't feel like it, I don't really think that they will, you know, be <i>impressed</i> by it...” (Participant 7)

“Laziness. [...] Pff... Hmm... Laziness an just probably canna be bothered wi the place.” (Participant 9)

“You have that, you have that, but you know, people don't wanna, people don't care, about that, you know, so they have to find, unfortunately, [coughs] they have to, you know, you can't really motivate them 'cause they have to find that inside of them... 'Cause, you know, they have the chance to do it and it's for free [chuckles] They just not motivated.

Interviewer: “Yeah... So you think, those programs and activities exist but you don't think it encourages people to go outside more?

Participant: “Yeah.[...]You get the leaflets you know, going out all around and you can read it you know like - ah we're ha- having a- a public gathering or, you know, activities or range of stuff and uh... um wha- you know uh, for your, um you know, and this stuff's all free, people just, don't care. You get the leaflets you know, going out all around and you can read it you know like - ah we're ha- having a- a public gathering or, you know, activities or range of stuff and uh... um wha- you know uh, for your, um you know, and this stuff's all *free*, people just, don't *care*. ” (Participant 10)

Crowds when seeking solitude

“Busy-ness for me is a barrier ah don't like in busy sp- green, ya know, ah don't, green space. [...]Ah like sort o' the big green space where there're not, ah- too many people” (Participant 2)

“You go to the open spaces, dya know what I mean, there's- there's always *people*. [...]I mean, maybe some people feel funny to do it because of the *amount* of people that there is. I mean a few time a've went and I've been like "*woah* there's loads of people here, I'm just gonna *leave* it today".” (Participant 8)

“Uh... mm... most- I think that *overcrowded* places would for me, could be the- eh... if there is a place with the lack of the... uh... there is the room. Uh, lack of the *space*. Eh...” (Participant 11)

Not knowing benefits of Greenspaces

“What else would they face? Emm... Maybe not knowing about the *benefits* of, ya know, what ya can get out of it an...[...] ...and how it's, yeah, yeah that'll be sort of like a knowledge of benefits of, getting out there, an', mm...” (Participant 2)

3.4.3.2Time Pressures

Five participants discussed lack of time as one of the significant barriers to engagement. Work and other commitments were described as having a priority, which made it difficult to fit in time to spend within greenspaces.

One participant particularly highlighted that seeing greenspace use as less of a priority is a reflection of deprioritisation of well-being, especially in the context of significant life stressors

such as single parenthood, health problems and economic concerns. This participant was of the belief that deprioritizing well-being was a cultural issue and people were increasingly being socialized to prioritise other issues over and above actions that would lead to well-being.

Table 3.8 Subthemes and supportive quotes for the theme “Time Pressures”

Time Pressures
<u>Lack of Time</u>
“So, my children would like to go more often, but it’s just fitting it in.” (Participant 1)
“Ah try during the week to get you know maybe get once or twice out during the week but not as often as ah would <i>like</i> really, but it’s just really work dependent.” (Participant 2)
“I think the <i>biggest</i> barrier to be using green spaces is <i>time</i> .” (Participant 5)
“I- ah think the <i>barriers</i> are, em, well, life- life's a <i>rush</i> . So, people think they've not got the <i>time</i> .” (Participant 6)
<u>Deprioritisation of well-being</u>
“Um, I think people placing value on their <i>time</i> ... is probably the biggest barrier to like, getting the <i>benefits</i> of using a green space, and I think one of the reasons why <i>I</i> prioritise it is because I'm <i>used to</i> doing that. I think, like I said, sort of in terms of growing up and stuff, I <i>know</i> the benefits of having... you know, fresh air, quote unquote. Um... [...] I think people tend not to value their own health if they have more pressing issues about their own circumstances. So, whether that's health or finance or... [inhales] um... families- you know, single parent families are <i>insanely</i> busy. You know, parents who- I mean, I see quite a lot of parents prioritize obviously <i>everything</i> else except for their <i>own</i> wellbeing. Cause that's the only, like, allocation of their own kind of attention that they can really give. Um, I don't imagine it's easy to switch off, particularly if you- you know, you're up against it with trying to make ends meet.” (Participant 5)
“I think that's- and that's not just about, you know, um, exercising more or using green space, but that's generally a <i>cultural</i> issue, <i>particularly</i> in this country. I can't really speak for anywhere else; I think we've become almost sort of socialised to believe that... priorities- our first priorities are not our own wellbeing. And that's something I think quite strongly when it comes to sort of mental health, in my experience in <i>that</i> side of things, like both professionally and personally.” (Participant 5)

3.4.3.3 Greenspaces perceived as being “boring”

Four participants indicated that people could perceive greenspaces as being boring. The need to self-entertain in greenspaces (unlike during other activities such as going out to a pub) was discussed by one participant, who expressed not readily being able to think of activities they could do on their own when in greenspaces.

Table 3.9 Supportive quotes for the theme “Greenspaces perceived as being ‘boring’”

Greenspaces perceived as being ‘boring’
<p>“Um, the boredom factor. [...] I find greenspaces a bit dull.” (Participant 3)</p> <p>“Not rea- well, a pub is a place, of- it's a service. [...] Where you can get <i>food</i>, you can get <i>drinks</i>, you're being <i>served</i>. You feel comfortable and convenient. When you go to green space you have to entertain yourself. [...] And that sometimes, I think for many people is... is a challenge. Like, what am I gonna do? <i>Okay</i>, I'll go to a park, sit down, well okay I can read a book for an hour. And then what? My friends will come along, okay we'll play some... I dunno... frisbee, we'll have a pint- well then what?” (Participant 4)</p> <p>Some people are "Goin' tae a park? The hef- effin hell do you want tae go tae a park for? It's boring!" [...] "Well hav ya tried it?" "Naw". "So go 'n try it fur me". (Participant 9)</p>

3.4.3.4 Availability of technology

Three participants expressed that people preferred to engage with technology over spending time in greenspaces. Two participants brought in examples of how children would more readily prefer entertainment through technology, rather than spending time outdoors. One participant expressed being drawn to using their phone and looking up their social media while they were in greenspaces. This was described to negate the point of spending time there in the first place.

Table 3.10 Subthemes and supportive quotes for the theme “Availability and use of technology”

Availability and use of technology
<p><u>Preference of technology over greenspaces</u></p> <p>“Ehm, I don't know, parks just irnae really popular anymore, I'd say. People would rather do other things. Like hold their tablets an phones an... [...] You know, all that stuff.” (Participant 8)</p> <p>“When they're at their own hoose, no, that's it. Computer. [...] They just sit there like that [mimes]. Usually, when I go up tae their hoose an go in an they're sitting on the computer I just walk in and go "tchh", turn the telly aff! [...] "Whaaat!" [laughs] "Git ootside!" Nice lovely sunny day and they're sitting in the hoose playing a playstation... [...] When a wis a kid when it was sunny when you got up in the morning, at 8 o'clock in the morning, an it wis the summer holidays you were oot, oot all day. Comin back at tea time whin your belly was hungry” (Participant 9)</p> <p>“And also you know like people, I fink in now, in 21st century, they like, you know you can- no offence to Edinburgh, but they becoming zombies. So, you can see people walking [laughing] without take a-a look around - what's happening around - and just walking and playing in the mobiles, right? [...] Or at home and watch TV and everybody do that so... and, you know, I think that's kind of the poison of our generation.”</p>

(Participant 10)

Technology use in greenspaces

“Uhm, I sometimes do... but I'll always feel like I, “I dunno what I'm doing here,” when I'm alone. [...] I usually do it when, I dunno, I don't have any money to go to somewhere else but I'm waiting-[...]-for, I don't know, my partner to finish work, and I'm just sitting there, and I end up just... scrolling through my feed, and what's the point in me actually being in the park then?” (Participant 4)

3.4.4 Proposed solutions to increase engagement with greenspaces:

3.4.4.1 Willingness to Engage with Greenspaces

This theme was considered to capture participants' willingness to engage with greenspaces, by showing openness, intention and forward planning. Showing commitment and intentionality to use greenspaces were described as being important for facilitating engagement. Seven participants indicated that seeing others use greenspaces or hearing from others about this encouraged them to also engage with greenspaces. One participant linked this to an enhanced sense of community.

Related to this, being open to engaging with greenspaces and showing willingness to spend time in greenspaces were highlighted as important factors in creating a positive perspective shift about engagement. Some participants commented that in the absence of this openness, individuals are likely to not engage with greenspaces. Three participants expressed intentionally choosing greener routes and greener views, which reflected their commitment to maximize time spent in greenspaces. Two participants expressed that planning ahead and committing themselves to a plan (either on their own or with others) facilitated their motivation to engage with greenspaces.

Table 3.11 Subthemes and supportive quotes for the theme “Willingness to Engage with Greenspaces”

Willingness to Engage with Greenspaces
<p><u>Community use encourages others</u></p> <p>“um... I suppose the more it's used by normal, people, as part of their daily lives, the safer it feels...” (Participant 1)</p> <p>“Ya know ah know that, ah think sort of word of mouth as well ya know, ah know like as ah say people that - that ah know that 'ave recently sort of taken up cycling, they love it so much and they're like always sort of bangin' on about it an', ju- Maybe that word of mouth would be an option ya know em, eh, what else..” (Participant 2)</p> <p>“Erm, like for me it's actually quite nice if you're walking through on like a Saturday afternoon, and are some, like there's like a football match going on or something. Like, as weird as it sounds, having said that I need to get away from people, there's something quite nice about that kind of- feeling like there's something going on? Umm... and it's- it's nice to feel like these spaces kind of get used, even though I can sort of maintain my anonymity and stay sort of at the back and not really get involved. [...] But it's nice to feel that it's kind of getting used. It feels like there's a community that use a green space. Um, that's something that is quite nice, so... I don't know, sort of where that fits in [...] -in terms of your questions, but that's certainly something that's- that's good, and I feel like it's an obvious way of getting people to see there is park, um, that they could use at another time other than just using it for sports.” (Participant 5)</p> <p><u>Openness to engage with greenspaces is a facilitator</u></p> <p>“But I know that uh, I mean I've - I've - actually no, I've just thought of another barrier - in the past I was more cautious before I became more familiar, I think before they... when did they build the <R Park 1>? I don't know... I remember thinking would I go there on my own? Is it safe? But I've - I've actually, through going, walking through it quite a lot to the allotment, I don't actually feel that way anymore.” (Participant 1)</p> <p>“Especially among the young people... Well maybe, maybe it would be achievable as step by step, you know like uh, you know, just try it a little bit, every day, one day, how does it feel? [...] Ah, just... It's a hard question actually...[...] For, f-you know like, f-five minutes of, having uh, basketball or, actu- or kind of uh, you know like a exploration. [...] Just five minutes and see, if they enjoy that, and you would like to continue it... 'cause 5 minutes is nothing...” (Participant 10)</p> <p>“Yes yes yes... [inhales] But I was also open to it, because there were people in that area who were actually... because it was a small city there were, things that you could do - there was a cinema, there was a theatre, there were... cafes. You could lead a kind of an urban lifestyle if you wanted to. So you sh- wouldn't take advantage of the green space and nature... [...] But for me it was I think my choice to give it a try you know, something new, see what I can do with it, how I can benefit from it and... it had good results [chuckles].” (Participant 7)</p> <p><u>Planning ahead</u></p> <p>“Sometimes if it's not just up to me but if there's a specific thing with someone waiting for me, that helps...” (Participant 1)</p> <p>“I mean, depending on your-your stage in life, but an-an organised walk, say we'll meet at the play park and walk, you know... if-if my friend said, “I need more exercise- can you support me with this?” or something like that then we'd arrange a date and do it... just...” (Participant 1)</p> <p>“I think the best th- thing to do, before you get home, like put it in your head, like OK I just gotta shower</p>

and get out, ‘cause as soon as [laughs] soon as you, you know sit down, lay down on the bed, like that's it [laughs] don't wanna get up.” (Participant 10)

Intentionally choosing greener routes and views

“I chose a, I chose a gardeny route you know, coz there's quite a lot of main roads where I try to avoid them” (Participant 1)

“I'd choose it over walking along the road. [...] It's kind of something that's- that might be relevant. Um, if I can walk through somewhere that's- that's green, I would certainly choose to do that rather than walk along the road or... and you know, that's not just because of safety or anything, just because it's nicer [laughs].” (Participant 5)

“Also, I chose, that's an interesting point, I chose my room on the basis of, like, the view that I would have...” (Participant 7)

3.4.4.2 Organised community activities and events:

Five participants expressed that organised community events and activities would attract people.

Some of these were described as regular events (Such as organised nature walks, exercise classes)

for groups of people across the lifespan, such as buggy walks or adapted events for elderly.

Larger events (such as festivals) were also described as potentially attracting individuals.

However it was recognised that this could be a barrier for some people who wished for solitude in

greenspaces. Two participants expressed a desire to have more things to do in green spaces; one

suggesting a reminder list for individuals about the activities they can carry out in greenspaces.

One participant highlighted the role of systemic structures in increasing access to greenspaces

(such as the schools organising events in greenspaces, which the families may later return to, or

schools providing access to allotments for families).

Table 3.12 Subthemes and supportive quotes for the “Organised community events and activities”

Organised community events and activities

Organised events and activities

“So ... s- if, if um... things that targeted particular groups of people...[...] Things like the buggy walks are good aren't they... or, slower walks for elderly people, things like that.” (Participant 1)

“Uhm, no, well yeah, some activities or events, they don't have to be like on a constant basis but just... [...] Uhm... even probably like free runs or... The perfect for me would be board games in the park where everyone can join and just play some board games. Or, I dunno... markets. [...] Yeah, things like that. Or

even just meet ups, I dunno. Social meet ups.”

“Ehm, like events, if ya get me? [...] I- I- I think people would go to them a lot more if... people say "oh, there's a funfair coming up" or whatever.[...] Or something like that. Or "oh, there's a big game of football coming up, I'll go and participate in that" for charity or whatever.” (Participant 8)

Having things to do in greenspaces

“So, it would be nice to have... I don't know... not a website dedicated to it... [laughs] [...] But... Uhm... Like some kind of a list that I would somehow find that would tell be about all those things that are very obvious that I should have thought about myself and never did. [...] And be like, "oh yeah! I could... dunno, make this wristband sitting in the park.” (Participant 4)

“Maybe just the fact that, I dunno, mibee some people would like more to do in green space.” (Participant 8)

3.4.4.3Raising awareness

One participant expressed that understanding the benefits of greenspaces and encouraging individuals to prioritise their well-being needs would lead to more engagement. Using public health venues (such as pharmacies and GP surgeries) was suggested as suitable places to provide information about the benefits. One participant recounted that they began engaging with greenspaces on their GP’s advice (initially to manage low mood), highlighting the role public health professionals can have in raising awareness about the benefits of engaging with greenspaces.

Table 3.13 Subthemes and supportive quotes for the theme “Raising Awareness”

Raising awareness
<u>Importance of prioritising well-being</u>
“But I feel like... I feel like in terms of you- you know, education and awareness of what- you know, the priorities of local government is, I think that more effort could be made in making people aware. I mean, I feel very strongly about making people more aware of their wellbeing.” (Participant 5)
“Yeah, I kind of alluded to it just- and I think the biggest solution in terms of trying to get people to use green space more is- is, to try and get people to prioritize it through an awareness of sort of wellbeing and mental health. I think that's part of it I think... People are beginning to sort of prioritize things like activity and exercise. I think people are a lot more aware that inactivity is bad for you, for so many reasons. Um, and it's not to do with, sort of spending time alone, but that- that can be sort of different from being inactive, um...” (Participant 5)
“...they’ve got something similar an everythin, and that’s all aimed mostly at children... but, em, it's... that sort of thing is good to be maintained. And it's not- not to be classed as low priority by the powers that be,

because it's all about quality of life, I think.” (Participant 6)

Role of healthcare professionals in raising awareness of benefits

“... Maybe that word of mouth would be an option ya know em, eh, what else... Mm, more sort of information and stuff in GP surgeries, sort of ya know pharmacies, stuff like that, the benefits and, eh [pause]” (Participant 2)

“Doctor says "do you get out much?", ah says "och, a go a walk now an again, eh, up aroond mah block an up round the woods an that when I've got my brother's dogs".[...] Ehh, I said, "but that's aboot it". He says, s- he says, "probably best cure for depression", he says, "goin' on a walk", an he says, "even going up the top o' Arthur's Seat an", he says, "sittin there for a couple o' hours", he says, "watching Edinburgh an watching the world go by". He says "it's suprising the amount ae... how much it de-stresses you". (Participant 9)

3.4.5 Theory Construction

The emergent themes were considered for consturction of theory. While it was possible to see some initial and tentative connections between different themes (such as between lack of motivation, depression and external pressures such as availabilty of time and prioritisation of work over leisure), there was not adequate theoretical saturation to allow for a robust and comprehensive theory. The retrospective nature of the secondary analysis, with no opportunity to gather more data for the purposes of theoretical sampling, meant that the endeavours for theory construction was limited to the existing dataset only.

3.5 Discussion

3.5.1 Relevance of the current findings to existing literature

Participants described many benefits of engaging with greenspaces, as well as barriers to engagement and potential solutions to these. Rather than focusing on well-discussed external and environmental themes, the current analysis focused on presenting themes relating to internal and less frequently discussed factors. It is hoped that this will add to the existing discourse about facilitating engagement with greenspaces in deprived communities. However it is acknowledged that physical/external factors relating to engagement interact with social and community contexts (Seaman, Jones & Ellaway, 2010) and successful interventions to facilitate engagement should take both domains into account (World Health Organization, 2017).

3.5.1.1 Benefits

Most participants were in agreement that greenspaces had a positive impact on their mental health and well-being. Greenspaces were described as being relaxing and participants expressed experiencing better present moment awareness by observing the nature. This is fitting with the theoretical views such as the Attention Restoration Theory (Kaplan & Kaplan, 1989; Kaplan, 2001) which suggests that greenspaces and soft movements within the nature produce a restorative cognitive effect by fulfilling depleted attentional resources. The impact of present moment awareness on well-being in greenspaces is recognised and intervention projects have been developed to facilitate engagement with greenspaces using a wide range of mindfulness based techniques (Ambrose-Oji, 2013), sometimes with a focus on harder to reach communities (e.g. Nature4Health Project, as cited in Public Health England, 2020).

The themes around feeling connected to a community and perceiving a shared sense of values are consistent with previous research findings, which suggested that exposure to greenspaces have a positive impact on perception of social cohesion within communities (Tilov, Dimitrova & Dzhambov, 2017). Social interactions are thought mediate the relationship between greenspaces and the well-being effects of engagement, tensions between different groups (regarding the use of the space and the identities of the users) shape the meaning and experiences of greenspaces (Dinnie, Brown & Morris, 2013).

Dinnie et al. (2013) also discussed different kinds of social interactions that take place within greenspaces (e.g. fleeting interactions, formal/informal use) and some individuals' preferences for using greenspaces on their own, rather than with company. This was also reflected in the current study where some participants expressed preferring to use greenspaces on their own to relax or get away from life stressors.

3.5.1.2 Barriers and Proposed Solutions

Participants discussed a number of internal barriers to engaging with greenspaces. When considering interventions, it is important to differentiate between lack of motivation, lack of interest and perceptions about greenspaces. Previous research suggests that reasons for lack of engagement with natural environments can be predicted by different factors; for instance while area deprivation was found to predict lack of interest, individual socioeconomic status was predictive of individuals stating “no particular reason” for their lack of engagement (Boyd et al. 2018). How demographic factors impact on lack of engagement would thus be important when considering community-tailored interventions to facilitate engagement with greenspaces.

Providing additional information about the benefits of greenspaces was one of the proposed

solutions. It would be important to establish through future research whether such information can adequately create a shift in perception for individuals who are not interested or not willing to engage with greenspaces.

While organizing events and activities were one of the proposed solutions by the participants, individuals' needs and their expectations from these events may differ and this can ultimately impact on their engagement (Hanson, Guell & Jones, 2016; Public Health England, 2020). Therefore, the events or activities should be tailored towards the needs of a particular community. Considering that low motivation has been highlighted as a barrier, additional support for implementing intentions or planning ahead may be important aspects to interventions to facilitate engagement. Exploring individual's beliefs, attitudes and perceived level of control using a Theory of Planned Behaviour approach (Ajzen, 2011) was suggested to help design effective interventions such as implementation of exercise programs in greenspaces (Flowers, Freeman & Gladwell, 2017).

Time pressures have previously been identified as important barriers to engagement with greenspaces (Grahn & Stigsdotter, 2003; Mäkinen & Tyrväinen, 2008) and urban bluespaces (Pitt, 2019). This theme also emerged in the current study. Additionally, deprioritisation of well-being needs was described as the growing trend within the society, which impacted on how individuals' chose to spend their time. Deprived communities may experience particular challenges with the prioritisation of well-being needs, since there may be significant external pressures for prioritising other domains (e.g. financial pressures or poor job security).

Availability of technology was described as a barrier, both when choosing whether to engage and while engaging with greenspaces. It appeared that using technology within greenspace (e.g. social

media) reduced one's present moment awareness, and participants were aware that this negated the point of them spending time in the greenspaces in the first place. This suggests that being present in greenspaces may not always equate to engaging fully with greenspaces. This may have implications for future interventions, especially those which may wish to incorporate an element of present moment awareness.

3.5.1.3 Considerations for the Socioeconomic and Political Context

While the concept of equigenesis provides opportunity to address health-related inequalities (Mitchell, 2013) and while facilitating access to greenspaces in deprived communities might bring positive change, it is important that the responsibility for addressing inequalities does not shift solely upon those who are most affected by such inequality. The systemic nature of inequalities within the communities creates additional challenges in creating change. For instance, motivation to visit greenspaces was previously shown to be associated with the quality of greenspaces (Fongar et al. 2019). However greenspace quality and safety in deprived areas tend to be worse when compared to more affluent areas (Rigolon, 2016; Cronin-de-Chavez, Islam & McEachan, 2019), which is likely to create additional barriers for engagement, over and above the motivation to engage itself. The 'environmental injustice' means that availability of a greenspace in the community does not parallel equitability in access and quality (Marmot, 2010).

Furthermore, the difference in the availability of social capital was shown to contribute to differences in leisure-time physical activity and health inequalities across different socio-economic groups (Linsdtröm et al 2001). Financial pressures, lack of free time and prioritization of work over well-being are systemically embedded within the socioeconomic structures and

therefore interventions to address greenspaces engagement should take wider contextual factors into consideration. This is in keeping with a recent framework proposed by Masterton et al. (2020) who suggested that greenspace interventions which aim to improve psychological outcomes should consider multiple depths of contexts, and map out the specific intervention components, mechanisms of action and outcomes of interventions around the themes of Nature, Individual Self and Social Self.

3.5.2 Strengths

The recruitment criteria considered a number of factors (such as distance between greenspaces and recruitment zones or participants ability to visit greenspaces unaided) which minimized risk of confounds regarding accessibility to greenspaces. The use of SIMD as a standardized measure of deprivation enabled an objective assessment of level of deprivation within the communities and helped maintain similar community characteristics across the four recruitment zones.

Additionally, the original research team has spent considerable effort in pursuing a randomised recruitment strategy which would have minimized selection bias and provide the opportunity for better community representation within the sample.

3.5.3 Limitations

With the exception of one person, all participants expressed engaging with greenspaces regularly. Thus it is possible that the existing interviews may have not adequately captured the perceptions and experiences of those individuals who are not engaging with greenspaces as much. It is possible that those who are not already engaging with greenspaces experience different barriers and have different set of proposed solutions which the current sample did not represent.

It was also observed that the existing dataset is not ethnically diverse. It is possible that individuals who belong to Black and Minority Ethnic communities and who live in deprived areas of the city may experience specific barriers to engagement with greenspaces, which would not have been represented in the current sample.

3.5.4. Limitations of the re-analysis

The interview scripts and the demographic information were the only sources of information the researcher had at the time of re-analysis. Not being involved in the recruitment and in the interview processes, the current analysis was removed from the personal observations that can provide significant contextual information with regards to participants and their experiences. This was mitigated to a certain extent by keeping a reflective diary during the analysis process to examine researchers' biases about the interview scripts and how these may have impacted on the analysis.

Using a complete dataset meant that it was not possible to use Grounded Theory's iterative process of analysis to explore emerging themes during recruitment and focus the research questions towards other relevant areas of inquiry. To minimise risk of bias within the dataset, questions or comments from interviewers which were perceived to be leading were omitted from the analysis.

A particular challenge was striking a balance between the desire to explore all possible relevant themes and the risks of including themes less well-grounded within the data (e.g. when fewer participants discussed a theme). Considering the desire to add to existing literature, a decision

was made to be as inclusive as possible when exploring themes. It was not possible to construct a comprehensive and well-grounded theory. It was felt that the theme representation and theoretical saturation within the available data would not adequately support the construction of a robust theory. This is unfortunate because this could bring further understanding to the complex connections within the emergent themes and provide hypotheses which could lead to targeted interventions based on the local community's needs. It could be argued that three overarching themes of benefits, barriers and proposed solutions were wide perspectives for the purposes of theory construction with the available data. Future research could focus more closely on these overarching themes separately and pursue theoretical sampling to further shape and construct the theoretical inquiry.

3.5.4 Conclusion

The emergent themes suggest that participants are aware of the benefits relating to mental health, well-being and community connection benefits. The barriers and solutions discussed draw attention to psychological factors such as motivation, willingness, and attitudes towards greenspaces. These provide further discussion points for future interventions designed for improving accessibility and engagement with greenspaces. Tailoring the interventions based on the needs and perceptions of the local communities will likely facilitate better engagement.

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APPENDICES

APPENDIX A: Submission Guidelines for Psychology and Psychotherapy

7/25/2020

Clinical Psychology & Psychotherapy

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[7. Post Publication](#)

[8. Editorial Office Contact Details](#)

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Clinical Psychology & Psychotherapy aims to keep clinical psychologists and psychotherapists up to date with new developments in their fields. The Journal will provide an integrative impetus both between theory and practice and between different orientations within clinical psychology and psychotherapy. *Clinical Psychology & Psychotherapy* will be a forum in which practitioners can present their wealth of expertise and innovations in order to make these available to a wider audience. Equally, the Journal will

contain reports from researchers who want to address a larger clinical audience with clinically relevant issues and clinically valid research. The journal is primarily focused on clinical studies of clinical populations and therefore no longer normally accepts student-based studies.

This is a journal for those who want to inform and be informed about the challenging field of clinical psychology and psychotherapy.

Submissions which fall outside of Aims and Scope, are not clinically relevant and/or are based on studies of student populations will not be considered for publication and will be returned to the author.

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Authors may also post the submitted version of a manuscript to a preprint server at any time. Authors are requested to update any pre-publication versions with a link to the final published article.

2. MANUSCRIPT CATEGORIES AND REQUIREMENTS

Research articles: Substantial articles making a significant theoretical or empirical contribution (submissions should be limited to a maximum of 5,500 words excluding captions and references).

Reviews: Articles providing comprehensive reviews or meta-analyses with an emphasis on clinically relevant studies (review submissions have no word limit).

Assessments: Articles reporting useful information and data about new or existing measures (assessment submissions should be limited to a maximum of 3,500 words).

Practitioner Reports: Shorter articles (a maximum of 2,000 words excluding captions and references) that typically contain interesting clinical material. These should use (validated) quantitative measures and add substantially to the literature (i.e. be innovative).

3. PREPARING THE SUBMISSION

Parts of the Manuscript

The manuscript should be submitted in separate files: title page; main text file; figures.

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5. Conflict of Interest statement;
6. Acknowledgments;
7. Data Availability Statement, if applicable
8. Abstract, Key Practitioner Message and keywords;
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10. References;
11. Tables (each table complete with title and footnotes);
12. Figure legends;

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Please refer to the journal's [Authorship](#) policy in the Editorial Policies and Ethical Considerations section below for details on author listing eligibility.

Acknowledgments

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Key Practitioner Message All articles should include a Key Practitioner Message of 3-5 bullet points summarizing the relevance of the article to practice.

Keywords

Please provide five-six keywords (see [Wiley's best practice SEO tips](#)).

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2. Footnotes to the text are not allowed and any such material should be incorporated into the text as parenthetical matter.

References

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Book

Bradley-Johnson, S. (1994). *Psychoeducational assessment of students who are visually impaired or blind: Infancy through high school* (2nd ed.). Austin, TX: Pro-ed.

Internet Document

Norton, R. (2006, November 4). How to train a cat to operate a light switch [Video file]. Retrieved from <http://www.youtube.com/watch?v=Vja83KLQXZs>

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Endnotes should be placed as a list at the end of the paper only, not at the foot of each page. They should be numbered in the list and referred to in the text with consecutive, superscript Arabic numerals. Keep endnotes brief; they should contain only short comments tangential to the main argument of the paper.

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Author Guidelines updated 18th April 2018

APPENDIX B: Studies excluded from systematic review

Table 1 Studies excluded from sytematic review and reasosn of exclusion

Study	Reason for Exclusion
Albertson, 2013	Conference abstract of excluded thesis study
Albertson, 2013	Intervention is compassionate body scan and LKM (not CFI)
Alden 2015	Instruction based CFI task through VR for acting compassionately
Alliger-Horn et al. 2016	Intervention is Imagery Rescription (Not CFI)
Armstrong, 2012	Intervention is Guided imagery intervention (not CFI)
Ascone et al., 2015	conference abstract only of included study (Ascone et al. 2017)
Brougham et al. 2019	Conference abstract of excluded thesis study (Brougham, 2018)
Brougham, 2018	Application of CFI in Intellectual Disabilities, not measuring effectiveness
Campion, 2015	Intervention psychoeducation and meditation (Not CFI)
Dennington, 2012	Intervention as compassionate meditation on memory (not CFI)
Desborders et al. 2012	Intervention is CCBT and MAT (not CFI)
Gee, 2012	Only used self-reported mood rating – no formal mood measure.
Gilbert et al. 2006	Correlational study of visualization intervention
Gilbert, 2009	Book chapter without empirical data
Hackmann, 2005	Case Study
Jacob et al. 2015	Intervention is Imagery rescripting (not CFI)
Kelly, 2010	CFI Intervention had additional components (Letter writing and self-talk)
Kelly 2012	Duplicate thesis of excluded study (Kelly, 2010)
Kelly et al. 2010	Published journal article of excluded thesis study (Kelly, 2010)
Kelly, Zuroff & Shapira, 2009	Intervention includes letter-writing tasks in addition to CFI
Kiley et al. 2018	Intervention is Guided imagery intervention (not CFI)
Lee, 2005	Case Study
McLeod et al. 2016	Conference abstract only of an included study (Campbell et al. 2019)
Naismith 2016	Correlation study and qualitative components – No access to full text
Naismith et al. 2019	Qualitative study
O'Neill & McMillan, 2012	Conference abstract only of included thesis study (O'Neill, 2011)
Penessi & Wade, 2018	Intervention is Imagery Rescripting (not CFI)
Pinto-Gouveia et al. 2019	Intervention includes mindfulness, valued action alongside compassion
Reynolds et al., 2019	Intervention is viewing compassionate images (not CFI)
Rockliff et al. 2008	Correlation study – no pre- / post- comparison for CFI
Simmonds, 2016	Participants received CFT-E group alongside study intervention
Synder-Roche 2012	Intervention is guided imagery - No access to full text
Toole & Craighead, 2016	Intervention is compassionate body scan (not CFI)
Toole, 2019	Intervention is compassionate meditation (not CFI)

CFI: Compassion Focused Imagery, CFT: Compassion Focused Therapy, CCBT:Computerised Cognitive Behaviour Therapy, MAT: Mindful Attention Training,VR: Virtual Reality,

APPENDIX C: Ethical approval letter for Dissociative Seizures study

South East Scotland
Research Ethics Committee 01

Research Ethics Service

2nd Floor, Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 465 5473



Enquiries to: Agnieszka Di Domenico Prada
Direct Line: 0131 465 5678

08 January 2020

Miss Safir Maner
DCN Neuropsychology Service
Western General Hospital
Edinburgh
EH4 2XU

Dear Miss Maner,

Study title: Exploring Self-compassion in Adults who Experience
Dissociative Seizures
REC reference: 19/SS/0064
Protocol number: CAHSS1903/01
Amendment number: AM02
Amendment date: 23 December 2019
IRAS project ID: 254199

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

The Sub-Committee had no ethical concerns regarding the amendment.

In discussion the Committee agreed that the questionnaire (DASS21) should not include personal identifiable data (name).

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Notice of Substantial Amendment (non-CTIMP) [Safir_Maner_17.12.19_Authorized Amendment 2 IRAS form ready for submission]		23 December 2019
Other [Amendment 2 Summary Document Version 1_17.12.19 sponsorshipreviewed]		17 December 2019
Other [DASS-21]		
Research protocol or project proposal [Safir_Maner_ 17.12.19_Study Protocol Version 4 sponsorshipreviewed]	4	17 December 2019

APPENDIX D: Participant Information Sheet and Consent Sheet



Academic and Clinical Central Office for Research and Development



Self-compassion in Dissociative Seizures
PISCF 30.07.19 v3.0
IRAS Project ID 254199

Participant Information Sheet

Exploring Self-compassion in Adults who Experience Dissociative Seizures

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Talk to others about the study if you wish. Contact us if there is anything that is not clear, or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

Self-compassion refers to our ability to be kind to ourselves at times of difficulty and distress, by recognizing and relieving our suffering. Existing evidence suggests that being self-compassionate can have a positive influence on people's psychological well-being and quality of life. The purpose of this study is to explore what self-compassion means to people who experience dissociative seizures. We would like to better understand what may help them take a more self-compassionate stance or prevent them from acting self-compassionately. This will help us identify how people who experience dissociative seizures could be supported in maintaining a self-compassionate attitude. We are therefore inviting 12-15 individuals to take part in an interview with the researcher.

Why have I been invited to take part?

We are asking individuals who experience dissociative seizures to consider if they wish to take part in this study. You have recently attended the hospital and your doctor has identified that you are experiencing dissociative seizures.

Do I have to take part?

No, it is up to you to decide whether or not to take part. If you decide to take part you are still free to withdraw at any time and without giving a reason. Deciding not to take part or withdrawing from the study will not affect the healthcare that you receive, or your legal rights.

What will happen if I take part?

You can take as long as you wish to decide whether you would like to take part in this study. It is advised that you consider your decision to whether to take part for at least 24 hours. If you wish to take part, you can either contact the researcher via the number below or you can let your clinician know. Your clinician will ask if you are happy to be contacted by the researcher with further information on the study. If you agree, your clinician will ask you of your preferred contact details (i.e. telephone and/or post) and pass these details on to the researcher. The researcher will make contact with you to provide more information and answer any questions you might have. If you are interested in taking part, the researcher will arrange a meeting with you.

During this meeting you will have the opportunity to ask more questions to the researcher and you can change your mind about participating at any time. Should you wish to continue with your participation, the researcher will carry out an interview with you, asking questions about what self-compassion means to you and your experiences with being self-compassionate. The interview session will be recorded on secure audio-recorder for the researcher to be able to transcribe and analyse the interview content. You will also be asked to complete two brief questionnaires which will provide us with more information about your experience with self-compassion and your mood. We will also ask you some demographic information at the end of the meeting.

Where will the study take place?

Your meeting with the researcher will take place on NHS premises; however we will try to be as flexible as possible when arranging a date, time and venue for your meeting. Unfortunately we are not able to reimburse your travel expenses.

If for some reason it is difficult for you to attend a meeting with the researcher, we will ask whether you would like to consider taking part in the study over the telephone. If this is the case, the researcher will send out a informed consent form to you in the post to sign and return in a stamped envelope, before a suitable time and date can be arranged to complete the interview and the questionnaires with you over the phone

What are the possible benefits of taking part?

There are no direct benefits to you taking part in this study, but some participants may welcome the opportunity to reflect on their own experiences. Furthermore, the results from this study might help to improve the healthcare of patients in the future.

What are the possible disadvantages of taking part?

It is not expected for the study to have serious disadvantages to participants. However for some people, self-compassion can be an emotional subject and some participants may experience distress when talking about their previous difficult experiences. Should this happen following your participation, the researcher will be available for a follow-up conversation to offer assistance and guidance about services which may be a source of support. Further information about services which can provide mental health support is also listed below on page 4.

What will happen if I don't want to carry on with the study

You will have the right to withdraw from the study at any point. You do not need to give a reason if you wish to withdraw from the study. Should you wish to no longer take part, this will not have any effect on the healthcare you receive. Should you decide to withdraw from the study, your data will be destroyed and the information you provided will not be used in the analysis of the study.

What happens when the study is finished?

All data will be kept securely in locked cabinets to which only the researcher and supervisors will have access. At the end of the study, anonymous data will be electronically stored by the Edinburgh University in secure servers. Your personal data will be stored for 6 – 12 months and anonymised research data will be stored for 10 years, as recommended by local research guidelines. Anonymised data may be used for further research in the future.

Will my taking part be kept confidential?

All the information we collect during the course of the research will be kept confidential and there are strict laws which safeguard your privacy at every stage. When you take part in the study, a unique identifier code will be used during the interview and on the questionnaires you complete. The initial recordings of interviews may contain some identifiable information however the researcher will make sure that the transcripts of the interview recordings will contain no person identifiable information. Once transcribed, the interview recordings will be deleted. For more information about how we will use your data please see the Data Protection Information Sheet.

With your consent, your GP will be made aware of your participation in this study. Your GP will not have any access to your research data. However, should you disclose any information indicating potential harm to yourself or others during the study, the researcher may need to notify your GP or other local authorities to safeguard your and others' well-being. If this situation arises, the researcher will discuss this with you prior to making contact with other services where possible.

What will happen to the results of the study?

This study will be written up as a doctoral thesis. The findings may also be published in a peer-reviewed journal or presented at a conference. It will not be possible to identify you or your answers in any final analyses and published results.

At the end of the study, the findings and the outcome of the study will be published on a publicly accessible website at <https://www.wiki.ed.ac.uk/display/HealthPsychResearch/Self-compassion+in+Adults+who+Experience+Dissociative+Seizures>. If you are interested in finding out the results of the study, you can visit this website or you can contact the researcher for more information.

Who is organising and funding the research?

This study has been organised and sponsored by University of Edinburgh and funded by NHS Education for Scotland.

Who has reviewed the study?

The study proposal has been reviewed by University of Edinburgh.

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee. A favourable ethical opinion has been obtained from South East Scotland Research Ethics Committee. NHS management approval has also been obtained.

Researcher Contact Details

If you have any further questions about the study please contact Safir Maner on 0131 537 2099 or email on: s1050219@ed.ac.uk

Independent Contact Details

If you would like to discuss this study with someone independent of the study please contact:

Ethel Quayle, Professor of Forensic Clinical Psychology

School of Health in Social Science,
University of Edinburgh
Teviot Place
Edinburgh
EH8 9AG
Tel: +44 (0)131 651 3943

Support Services and Resources

If you would like further support, you can contact:

Breathing Space: 0800 83 85 87
The Samaritans: 116 123

You can also look up additional resources and support via:
FND Hope website at <https://fndhope.org/> or <https://www.neurosymptoms.org/>

Complaints

If you wish to make a complaint about the study please contact:

Patient Experience Team
2nd Floor, Waverley Gate,
2-4 Waterloo Place
Edinburgh
EH1 3EG
Tel: 0131 536 3370
Email: feedback@nhslothian.scot.nhs.uk

Participant ID:		Centre ID (if applicable)	
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CONSENT FORM

Exploring Self-compassion in Adults who Experience Dissociative Seizures

Please Initial box

1. I confirm that I have read and understand the information sheet (30.07.19 and Version Number 3) and the Data Protection Information Sheet (01.04.19 and Version Number 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these questions answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without my medical care and/or legal rights being affected.
3. I understand that relevant sections of my medical notes and data collected during the study may be looked at by individuals from the regulatory authorities and from the Sponsors (NHS Lothian and the University of Edinburgh), or from the other NHS Board(s) where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.
4. I understand that the unidentifiable data collected in this study can be used in future research.
5. I agree to my General Practitioner being informed of my participation in the study
6. I agree to my interview being audio recorded.
7. I agree to take part in the above study

☐
☐
☐
☐
☐
☐
☐

To be able to participate in this project, please ensure that you read each statement and initial all of the boxes above.

_____ Name of Person Giving Consent	_____ Date	_____ Signature
_____ Name of Person taking Consent	_____ Date	_____ Signature

1x original – into Site File; 1x copy – to Participant; 1x copy – into medical record

APPENDIX E: Dissociative Seizures Study Interview Schedule

Interview Schedule

Could you tell me a bit about yourself and your experiences up until your diagnosis for dissociative seizures?

What does compassion mean to you?

What is the importance of being compassionate towards oneself?

How do you treat yourself when things go wrong/when you make a mistake?/ How do you treat yourself when things are difficult?

How do the seizures affect the way you treat yourself/How do the seizures affect what you think about yourself?

Can you think of a time you were compassionate towards yourself? What did that look like?

How easy/difficult is it for you to treat yourself kindly?

What gets in the way of being more self-compassionate?/Could you tell me about some of the reasons that make it more difficult to be kind to yourself?

What helps you take a more self-compassionate stance?/What would help someone to become more self-compassionate?

APPENDIX F: Questionnaires

DASS21

Name:

Date:

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree, or some of the time
- 2 Applied to me to a considerable degree or a good part of time
- 3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

DASS-21 Scoring Instructions

The DASS-21 should not be used to replace a face to face clinical interview. If you are experiencing significant emotional difficulties you should contact your GP for a referral to a qualified professional.

Depression, Anxiety and Stress Scale - 21 Items (DASS-21)

The Depression, Anxiety and Stress Scale - 21 Items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress.

Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest / involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset / agitated, irritable / over-reactive and impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items.

The DASS-21 is based on a dimensional rather than a categorical conception of psychological disorder. The assumption on which the DASS-21 development was based (and which was confirmed by the research data) is that the differences between the depression, anxiety and the stress experienced by normal subjects and clinical populations are essentially differences of degree. The DASS-21 therefore has no direct implications for the allocation of patients to discrete diagnostic categories postulated in classificatory systems such as the DSM and ICD.

Recommended cut off scores for conventional severity labels (normal, moderate, severe) are as follows:

NB Scores on the DASS-21 will need to be multiplied by 2 to calculate the final score.

	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely Severe	28+	20+	34+

Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety & Stress Scales. (2nd Ed.) Sydney: Psychology Foundation.



THE COMPASSIONATE ENGAGEMENT AND ACTION SCALES

Self-compassion

When things go wrong for us and we become distressed by setbacks, failures, disappointments or losses, we may cope with these in different ways. We are interested in the degree to which people can be compassionate with themselves. We define compassion as "a sensitivity to suffering in self and others with a commitment to try to alleviate and prevent it." This means there are two aspects to compassion. The *first* is the ability to be motivated to engage with things/feelings that are difficult as opposed to trying to avoid or suppress them. The *second* aspect of compassion is the ability to focus on what is helpful to us. Just like a doctor with his/her patient. The first is to be motivated and able to pay attention to the pain and (learn how to) make sense of it. The second is to be able to take the action that will be helpful. Below is a series of questions that ask you about these two aspects of compassion. Therefore read each statement carefully and think about how it applies to you if you become distressed. Please rate the items using the following rating scale:

Never 1 2 3 4 5 6 7 8 9 10 Always

Section 1 – These are questions that ask you about how motivated you are, and able to engage with distress when you experience it. So:

When I'm distressed or upset by things...

1. I am *motivated* to engage and work with my distress when it arises.

Never 1 2 3 4 5 6 7 8 9 10 Always

2. I *notice*, and am *sensitive* to my distressed feelings when they arise in me.

Never 1 2 3 4 5 6 7 8 9 10 Always

- (r)3. I avoid thinking about my distress and try to distract myself and put it out of my mind.

Never 1 2 3 4 5 6 7 8 9 10 Always

4. I am *emotionally moved* by my distressed feelings or situations.

Never 1 2 3 4 5 6 7 8 9 10 Always

5. I *tolerate* the various feelings that are part of my distress.

Never 1 2 3 4 5 6 7 8 9 10 Always



6. I *reflect on* and *make sense* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 Always

(r)7 I do not tolerate being distressed.

Never 1 2 3 4 5 6 7 8 9 10 Always

8. I am *accepting, non-critical and non-judgemental* of my feelings of distress.

Never 1 2 3 4 5 6 7 8 9 10 Always

Section 2 – These questions relate to how you actively cope in compassionate ways with emotions, thoughts and situations that distress you. So:

When I'm distressed or upset by things...

1. I direct my *attention* to what is likely to be helpful to me.

Never 1 2 3 4 5 6 7 8 9 10 Always

2. I *think* about and come up with helpful ways to cope with my distress.

Never 1 2 3 4 5 6 7 8 9 10 Always

(r)3. I don't know how to help myself.

Never 1 2 3 4 5 6 7 8 9 10 Always

4. I take the *actions* and do the things that will be helpful to me.

Never 1 2 3 4 5 6 7 8 9 10 Always

5. I create inner feelings of *support, helpfulness and encouragement*.

Never 1 2 3 4 5 6 7 8 9 10 Always

NOTE FOR USERS: REVERSE ITEMS (r) ARE NOT INCLUDED IN THE SCORING

Participant ID:		Centre ID (if applicable)	
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Exploring Self-compassion in Adults who Experience Dissociative Seizures

Demographic Information Sheet

Please answer the following questions:

1. How old are you?

- ☐ 16-17
- ☐ 18-20
- ☐ 21-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60-69
- ☐ 70-79
- ☐ 80-89
- ☐ 90+

2. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other (Please specify): _____

3. What is your marital status?

- ☐ Married
- ☐ Cohabiting/Civil Partnership
- ☐ Widowed
- ☐ Divorced/Separated
- ☐ Single
- ☐ Other (Please specify): _____

4. What is the highest level of education you have completed?

- ☐ Postgraduate Degree or equivalent
- ☐ Under graduate Degree or equivalent
- ☐ Higher education
- ☐ A Level or equivalent
- ☐ GCSEs grades or equivalent
- ☐ Other qualifications
- ☐ No qualification

Participant ID:		Centre ID (if applicable)	
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5. What is your current employment status?

- ☐ Full-time employed
- ☐ Part-time employed
- ☐ Not employed
- ☐ Retired
- ☐ Disabled, not able to work

6. How long ago did you first start to experience dissociative seizures?

- ☐ 6 months or less
- ☐ 6 months – 1 year
- ☐ 1 year – 3 years
- ☐ 3 years – 5 years
- ☐ 5 years – 10 years
- ☐ 10 years or more

7. When did you receive your diagnosis for dissociative seizures?

- ☐ 6 months or less
- ☐ 6 months – 1 year
- ☐ 1 year – 3 years
- ☐ 3 years – 5 years
- ☐ 5 years – 10 years
- ☐ 10 years or more

APPENDIX G: Submission Guidelines for Environment and Behaviour

8/2/2020

Manuscript Submission Guidelines: Environment and Behavior: SAGE Journals

Environment and Behavior

Submit Paper



Please read the guidelines below
before visiting the submission site!

[Submission Site](#)

Manuscript Submission Guidelines:

ENVIRONMENT & BEHAVIOR is an interdisciplinary journal designed to report rigorous experimental and theoretical work focusing on mutual influences between the physical environment and human behavior at the individual, group, and institutional levels.

Articles are sought in the following areas:

1. Theoretical work on the interrelationships between human environments and behavioral systems. Methodological papers will be considered, provided the primary focus concerns the environment-behavior relationship.
2. Reports on research relating to evaluation of environments designed to accomplish specific objectives—e.g., the social effects of different kinds of living accommodations or the effectiveness of hospital treatment areas.
3. Studies relating to the beliefs, meanings, values, and attitudes of individuals or groups concerning various environments—e.g., the meanings and values attached to neighborhoods, cities, transport routes and devices, or recreational areas. These studies are especially welcomed if they have behavioral data as well.
4. Studies concerning physical environments whose human mission is largely implicit or socially underdeveloped.

<https://journals.sagepub.com/author-instructions/EAB>

1/3

5. Studies of planning, policy, or political action aimed at controlling or changing environments or behavior.

Manuscripts of approximately 25 double-spaced pages (not including references, tables, or figures), following the style of the *Publication Manual of the American Psychological Association* (7th ed.), should be submitted on-line to

<http://mc.manuscriptcentral.com/eb>

Word documents to upload should include a 100- to 150-word abstract and 4 to 5 keywords, and tables and figures should be on separate pages.

Submission of a manuscript implies commitment to publish in the journal. Authors submitting manuscripts to the journal should not simultaneously submit them to another journal, nor should manuscripts have been published elsewhere in substantially similar form or with substantially similar content. Authors in doubt about what constitutes prior publication should consult the editor.

As part of our commitment to ensuring an ethical, transparent and fair peer review process SAGE is a supporting member of [ORCID, the Open Researcher and Contributor ID](#). ORCID provides a unique and persistent digital identifier that distinguishes researchers from every other researcher, even those who share the same name, and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between researchers and their professional activities, ensuring that their work is recognized.

The collection of ORCID IDs from corresponding authors is now part of the submission process of this journal. If you already have an ORCID ID you will be asked to associate that to your submission during the online submission process. We also strongly encourage all co-authors to link their ORCID ID to their accounts in our online peer review platforms. It takes seconds to do: click the link when prompted, sign into your ORCID account and our systems are automatically updated. Your ORCID ID will become part of your accepted publication's metadata, making your work attributable to you and only you. Your ORCID ID is published with your article so that fellow researchers reading your work can link to your ORCID profile and from there link to your other publications.

If you do not already have an ORCID ID please follow this [link](#) to create one or visit our [ORCID homepage](#) to learn more.

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More about this journal



Description



Aims and Scope



Editorial Board



Abstracting/Indexing

APPENDIX H: Ethical Approval Letter for Greenspaces study

Ethics Approval Letter CLIN761



The University of
Edinburgh
Medical School
Doorway 6, Teviot Place
24 July 2020

Dear Safir Maner

Application for Ethical Approval

Reference: CLIN761

Project Title: Reanalysis of Existing Unidentifiable data on Perceived Benefits and Barriers of Accessing Green Spaces in Deprived Communities

Thank you for submitting the above research project for review by the School of Health in Social Science Research Ethics Committee (REC). I can confirm that the submission has been independently reviewed and was approved on 8th May 2020.

The standard conditions of this approval are:

- I. Conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the REC.
- II. Advise the REC (by email to ethics.hiss@ed.ac.uk) of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project.
- III. Make submission for approval of amendments to the approved project before implementing such changes.
- IV. Advise in writing if the project has been discontinued.

The School's Research Ethics Policy and further information and resources are available on the School's website.

You may now commence your project; we wish you the best of luck.

Yours sincerely,

Sanni Ahonen

Administrative Secretary
School of Health in Social Science

APPENDIX I: Greenspaces Study Interview Schedule and Suggested prompts (as reported by MSc Research Team)

Interview Schedule and Suggested Prompts for each question

Question 1: Can you tell me a bit about how you spend time in green spaces in Edinburgh? If at all?

What's it like there? What do you like about it?/How often do you make it there?/Is that your favourite green space in Edinburgh? Why?/Do you know other people who like going there? Do you think it's popular?/Do you visit many other green spaces in Edinburgh? /Have you always used these spaces, or have you discovered them more recently?/How much is spending time in green spaces something that you prioritize?/Have you always had this sort of relationship with green spaces, for example, did you used to prioritize it more/less?

Question 2: What do you think are the benefits of spending time in green spaces?

That's great. Can you try to expand on that a little. /Do you think many other people in the community feel that way?/ What other benefits can you think of, of spending time in green spaces?/Do you think people commonly feel that way around here? /What other ways might people say that green spaces benefit us? /Would you say it benefits you in that way too?/Can you think of anything else that is beneficial about green spaces? /How would you say you discovered or learned about these benefits?

Question 3: What are the barriers you face spending time in green spaces? What stops you spending more time doing this?

Can you give me an example?/That's really interesting. Could you give another example? /Do you think a lot of people in the community face that barrier? Why/why not?/What other barriers prevent you spending more time in greens spaces?/Could you expand on that a little?/Can you give me any more detail? /What other barriers can you think of, that affect you or others? /Do you think that's quite common?/Have these barriers always been an issue, or was it different in the past? /Are there any other barriers you think that prevent people from engaging more with green spaces?

Question 4: What do you think are solutions that could help to overcome these barriers?

Brilliant. Can you explain how?/What else would help you to spend more time in green spaces?/You mentioned ___ barrier - what would help you overcome that? /How could that happen?/Can you give an example of how that would work?/What would be the best way to go about that?/Can you think of any other possible solutions to these barriers? That would help you or perhaps others?

Question 5: Finally, is there anything else you would add to a discussion of green spaces? What it was that interested you in this project, or anything you might add to the previous questions.

Is there anything else you'd like to add? Any other thoughts on the topic of green spaces?

APPENDIX J: Participant quotes supporting all of the emergent themes

Benefits

1- Positive Impact on Mental Health and Well-being

Positive Impact on Mental Health and Well-being

Positive impact on Mental Health

"It's the same with my family and I think it's probably the same with me; I'm less grumpy if I've been for a walk." (Participant 1)

"Yes. Because you know, if you outside... you, you know you, even if you just uh, say you just take a walk, you know, you- you feel yourself happier, I will say" (Participant 10)

".. Because the- for me it's the per-per-perfect reflection of the mind, eh, mental state; cause if I feeling that the- if I am doing too much other things, and exhausted, or contracting too much stress. Ehhh, by coming over there I could see the reflection, the, it's more like the balancing way. Eh... I discovered because, eh, it's... I learned that the, uh... it's the only way on how to live the quite, the... eh... the colour and the life with the serenity in this way." (Participant 11)

"Emm, I think s'good for me mood as well... ehh... sort of, emm, peace and quiet, so [chuckles], emm... an' time to reflect an' stuff as well an' things... um... and just generally seeing ma dogs out exercising I actually get quite a lot of pleasure from that as well, seeing them enjoying the green spaces too so... ah think it's really beneficial for mental health..." (Participant 2)

"I was born and brought up <R> though, and I do miss, kind of, accessing green spaces 'cause I used to just walk out the door and it was green all a- green all around. I think it does affect mental health a little bit." (Participant 3)

"Um, but certainly in my, sort of personal experience, when, you know, you need to just take a bit of time to yourself, whether it's for sort of for mental health reasons or... anything you know, that's sort of to do with your sort of general wellbeing, it's good to be able to have somewhere... where you can just go and have a walk and it doesn't, you know, need to necessarily be with anyone else" (Participant 5)

"Well, uh I think, eh, from a psychological point of view, I'd- I'd say it improves your mood. Em, it- it calms ya I think." (Participant 6)

"I quite like ta, the one thing about <R Park 4>, when you see it on a sunny day and there's like, you go see people just doing different things. There's cricket goin' on there's football goin' on, and there's people just lying about doing different things and it's... there's a certain amount of, um... utter, clear pleasure in watching all them people sort of enjoying themselves about, like, you know? So, I think that can raise your mood so, uh..." (Participant 6)

Space for relaxation

"It's also the- it could be the narrow-minded, the point of it that some people enjoying the being on the green spaces because like, on <R Park 3>, they got the possibility to do the- ehh... enjoy the barbeque and the- [...]spending time on the grass. Eh, and there is like also point the- there are freely with the... they are enjoying the time, yeah." (Participant 11)

"But then obviously it's just a nice environment to kind of unwind after a day at work. Uhm, I guess it's even better for people with kids, for people with dogs." (Participant 4)

"I mean, as much as anything really...just to sort of... [sighs] I guess it's sort of a bit of peace and quiet? Something along those lines, like it's kind of stress-free. Or it's- it's good it's relieving of stress to be able to walk through somewhere that's... Open and green... whether-or-not there's people there doesn't seem to make much of a difference, it just is, it's a good thing to be able to do particularly if you- I mean like I've been living, in a place where I don't really s-see the people that I l-live with. They're kind of a bit reclusive so..." (Participant 5)

"Kind of, maybe yeah. Just sort of getting out of my own head. It's nice to just go and sort of clear my head. Um, in the better weather I have even sort of sat and read in the park, for a little bit, or got a coffee or..." (Participant 5)

"Eh, there's um the Gardens, they're quite nice the <R Garden 3>, they're all, I find they're all sort of relaxin." (Participant 6)

"I think that's probably the best way to des- it's calming. It's reflective." (Participant 6)

"So I do that long walk, uh, which is actually very relaxing as well [laughs]" (Participant 7)

"Well, I... I am <R Nationality> and in <R European capital city> I live in the centre of the town, but, on a park. So it's basically, I'm on the first floor, over- above a very very busy street, but because I have this park right there, it- I see it from my window so that's very, very relaxing and that's... I'm kind of used to, you know, having green spaces and trees and all that as my means of relaxation [chuckles]" (Participant 7)

"Cause it does help me relax and when I want to relax I just don't need anybody else around, anybody I know at least "[chuckles][...] And, also, I sometimes go with my book, if it's nice and sunny and I can sit outside I take my book... and... No, I mostly go when I'm alone because I mostly go to, *unwind*, so... Yeah..." (Participant 7)

"Just helps relax your mind, eh. De-stresses you, as they would say. [...]Like, I would rather take a walk and sit an look about an sit and think about something else instead o' sitting roond the hoose looking at four walls." (Participant 9)

"It just, takes your mind off it an' helps you relax as well, eh. [...]Well, it helps me relax, don't know about everybody else. [...]Certainly helps me relax anyway." (Participant 9)

Being in the present moment

"Eh, I look out the window and I can see it. I can see, like, the hill and I can appreciate, like, the changing of the seasons. Being a <R> that's quite important to you, the changing of seasons. I've got trees that are mirrored to the seasons just outside my window, and they're important to me. Also got a little patch of green space just opposite my living room window that, um, that a woman developed which is really nice. Got like flowering cherry trees and... I can appreciate from my window. When you're feeling a bit down and depressed, always nice to get a look out and, mmm... to nature lifts your mood just a little bit. Depends how low you are though." (Participant 3)

"Gets you a chance to relax completely. Cause even... you can go home after work but then you're stuck with... I dunno... cooking and then you turn on some YouTube, or Netflix, or news, so you're getting from your computer screen and then there are some other problems at home, but if you actually spend some time after work in a green space, you get this buffer time or... [...] Uhm, away from those problems and I'm not yet with the other ones so it's a bit of like a... bubble." (Participant 4)

"Yeah. So sometimes I just need to go and, sort of quiet everything down and- and go and focus and like,

you know... sort of look to the horizon. You know when people say that when you get a bit seasick or something, it's a bit like that I guess." (Participant 5)

"I don't have to be in a park to sort eh, just going out 'n past it and you see the greenness 'n all this... It's nice to see. 'N when I see things get built on that's meant to be green, it makes me a bit, em... unhappy, is probably the word to say." (Participant 6)

"Em... that's a hard one. It's be- because... I mean I'm looking out the window just now and I see a tree and... See, that's part of- that's part of life, it's peaceful, it's-" (Participant 6)

"That- that's right, yeah. So, when you get back to nature you find yourself more as, it's um, your very mindfulness, it's- it's a good place to sort eh, um, recover. It's a good place to eh, think about things. Uh, calm yourself down. I've said all of this before but, that's what I think." (Participant 6)

"But best, it's not even using it! For the people across the road from a park, when they see that park every day, that can be good for them as well. 'Cause they see that, that's their contact with nature. They might never ever walk in that park, but if you took it away... that's a big thing, so. [...] Be- because it does the same thing. Ev- em, everythin' it stimulates you, I think it makes you feel... for all the things you could do by going to the park, for some people just seeing the park is a- is a fill up in their life. It's somethin nice to look at, or it's... So, if you're lookin' out on another house, as if you're looking at a garden, that's better. So, for a lot of places, eh, and urban areas that are sort eh, high density housing, ta actually see a park is good. 'Cause they don't have their own gardens..." (Participant 6)

"And then, you see the wildlife and like, you see birds and things like that. And, I don't know, that's just sorta... people just associate with things, you know?" (Participant 6)

"Eh, but when yur down there it's, when you git tae the tap o' the hill an that I have a pair o' binoculars in the house so you can sit and watch, like, the whole o' the countryside. Just a big massive view, eh, so you sit there for hours with a pair ae binoculars, eh." (Participant 9)

"Eh... Just the scenery basically an... Eh, aw the different animals you see an... [...] Just tryna think, eh... Probably just the fresh air an' the scenery an... animals an... how the environment works basically, eh? Cause it's amazing what you- sit and just by looking at a bird, at a tree an... "Is that a bird there aye?". You just sit an watch it like "aw right, that's whit its dayin" [chuckles] It's amazing whit they dae, like." (Participant 9)

2- Exercise and better physical health

Exercise and better physical health

"Uh... I s- umm, I suppose exercise is one aspect of it as well." (Participant 1)

"If you're outdoors at least you've, you've walked at least a few steps, haven't you? And got some fresh air." (Participant 1)

"Exercise you have your health and you know your mood as well 'cause you know, you become, you know, happier, uh, you know, fitter, you know... rather than, eating chocolate and, doing nothi - nah uh, not not that I don't like chocolate just, you know...." (Participant 10)

"Some of the people enjoying by the... they're playing the football or cricket on the- this terrain, so they're doing the runs around... yeah." (Participant 11)

"For me en... em... exercise, honestly." (Participant 2)

"Exercise. [...] Dog walking. Dog-walking is a double-edged sword though 'cause with dog-walking comes the poo." (Participant 3)

"And there's running and there's all sorts of benefits... jogging and... [pause]" (Participant 3)

"Apart from kind of obvious things with it being easier to be active if there's more green space around you. Um, like it's a lot more sort of motivation to go out for a run or go out for a walk or whatever, um, and that's obviously, you know, physically a really good thing." (Participant 5)

"Sure. I mean, I imagine most people would sort of tell you that- like I mentioned earlier, having a green spaces is a lot easier then to motivate yourself to go and do exercise, if you go outside to do that, if you don't have like a gym or something nearby. Um, which is certainly true here. I mean, it's- it's a lot further between sort of places where you could go to the gym. For example, down in inner city like <R Big City> or other cities around the UK. Um, so having green spaces that are just a- a bit more... accessible? I guess? So, if you've got some big green spaces here that's- that means you're probably n-nearer to one than you do to a gym-" (Participant 5)

"Yes, those are. Umm, at other times I guess [sighs]. Sort of to cut back on... I was saying something earlier about um, people using it to sort of, exercise and things like that. In the park, in <R Park 6>, there are actually some sort of little, you know, free exercise machines. But that's something that I've seen people using and it's the kind of people that you... not to make a judgement on it, but they're the sort of people that go and use it that maybe wouldn't go and use a gym or might not be as confident to go and use a gym. So that's kind of a good thing to see- [...] -people going and sort of trying it. And if that is a gateway to using something for more exercise then I think that's quite a good thing." (Participant 5)

"-in terms of your questions, but that's certainly something that's- that's good, and I feel like it's an obvious way of getting people to see there is park, um, that they could use at another time other than just using it for sports. Um, [inhales] it's also, you know, that kind of thing is a good thing... usually there's quite a lot of- a lot of money that people who, have, you know, like small, kind of, sports clubs or whatever, they end up spending all of their membership days essentially on renting somewhere to use, um, as a facility. And I think, having places like that, is like I said about the tennis courts earlier as well, I think making it more accessible for people to use that is a really good thing. Not just in terms of people using a green space. I think that's a good thing in general because it encourages people to be more proactive in trying to set up like, sports clubs, or to use it..." (Participant 5)

"-but, I just get the sense that it's kind of like a couple of groups of people - and it- it feels like they're always the same teams that are there. Like I seem to recognize people when I see them playing. Um, and it might just be that there's a group of maybe 3 or 4 teams that just play each other occasionally on a Saturday that use the same facility? Um, and that kinda then, yeah- that's what I'm talking about in terms of like, making things accessible. Like having sports facilities that are accessible to people. ..." (Participant 5)

"Em, it does wonders for yar fitness... [...]Em, for if you've got a long-term illness; like diabetes, heart disease... a walk in the park is- is both physically fit, and, em... it also sort of, just helps you sort of calm down and..." (Participant 6)

"Well I think green spaces are important for young people; and- and that they can play sport" (Participant 6)

3- Space for learning

Space for learning

Learning and skills building

"...Emm ah think for a, you know for other people, ah think there's - there's a lot o' activities in <R Wood 2> and you know <R Building 2> and a lot of sort of em... skills that people can learn there..." (Participant 2)

"... and they're learning supporting skills, you know what I mean? They're learning skills, and playing, and sharing skills - like sharing bikes. It's all good." (Participant 3)

"Well, they also learn bike skills because they're... and skate- and fitness and skateboarding skills, and..." (Participant 3)

"Uhm, oh for me personally was a good place to have some musical practice that I could can't do at home, for example. [...] Can't do it on a random street. [...] But just sitting under a tree, yeah why not? Just playing guitar and singing, no-one minds." (Participant 4)

"So, em... in <R Park 3> and, em, the <R> - the park rangers situated up there and they sometimes they do things, they talk about what the park is like, about the- about the rock formations and what's growing in there and everything. <R Park 11> they've got something similar an everythin, and that's all aimed mostly at children... but, em, it's... that sort of thing is good to be maintained..." (Participant 6)

Nature as a source of learning and curiosity

"...But also, for... for example for my son, he's fascinated with, umm... wildlife. He'll stop for every slug, so, it's about learning as well for him. He's 8 and he'll try and look things up, of course we haven't got books - enough - (chuckles) information for him, but..." (Participant 1)

"Its um, it's sort of learning I suppose... awareness of history perhaps as well..." (Participant 1)

"History and geography... (pause) they like the idea that Arthur's Seat used to be a volcano. He's quite into volcanos as well, and um, I tell him it is quite a long time ago but..." (Participant 1)

"[pause] Mm... Oh yeah! Like, you can, explore?[...] A new area. And, you can, you know, find new places, new... Uh... Yeah and discovery, you know, (the, some... new sights?)" (Participant 10)

"Or you see something, you go "mm, what's that?" an 'ave a wee look about." (Participant 9)

4-Social connectedness

Social connectedness

Connectedness to others in the community

"F-for the people and... well, you can meet peop- there's more chance you're gonna meet people [laughs]. 'Cause if you are watching the TV then, [laughing] then you don't- guess you won't meet anybody."

Exercise you have your health and you know your mood as well 'cause you know, you become, you know, happier, uh, you know, fitter, you know... rather than, eating chocolate and, doing nothin' - nah uh, not not that I don't like chocolate just, you know...." (Participant 10)

"I think it's the fact that they're a community group that- that- that... Well, it was two guys in a pub, as these things often are. You know what I mean? They came up with the brilliant idea and then I sent the money to there... I've given them some of my cash as well, just... 10, 20. So I'm also invested in this space, so I've given them money." (Participant 3)

"Fortunately, we don't have neither of those but, uh... it's a nice place to meet people. [...] Because people who you usually find in those green spaces are, tend to be quite nice. [laughs]" (Participant 4)

"Uhm, [hesitates] probably not very common but once in a while you get into that experience of... I don't know... throwing the frisbee at someone and they just pick it up and they go with the flow." (Participant 4)

"But it's nice to feel that it's kind of getting used. It feels like there's a community that use a green space. Um, that's something that is quite nice, so... I don't know, sort of where that fits in" (Participant 5)

"Ah like the <R Park 4>, uh, s-, it is, purely because I was brought up there. [...] I got a- it's a sense of belonging that I- that's my <R Park 4> if you know what I mean. It's not the prettiest but it's- it's there." (Participant 6)

"I think a lot of people feel that way. I think that some people just b- love their space, that uh, you see- you see the same people there all the time." (Participant 6)

"I think people, uh, benefits- there's- there's... I'm tryna think of any other benefit's that I've not mentioned. People are a lot more friendly. And they go uh, people are a lot more sociable when they meet each other in a park. You know, and they'll talk to ya, they'll say hello just to a total stranger. If you're walking along the <R Path 2>, you'll say, "G'd morning," "morning." Things like that; that changes as the day goes on. But, eh, if you see a- an individual walking, you're- you're likely to say, "hello," as opposed to ignoring them. So, um, you can see that it sorta, eh, creates a social, um, cohesion" (Participant 6)

"You know, people are, you're more likely to see a smiling face. Or walking along a path with their dog, or by themselves, rather than somebody in the street. Uh, cause if you say hello to someone in the street there's a chance you'll get a funny look. [...] Whereas it's perfectly normal to do it in a green space. Uh, people are more accepting of other people, in green spaces." (Participant 6)

"-but I think that it works everywhere like that. And... also I am thinking that, someti- I dunno - somehow I feel very close to people in these spaces." (Participant 7)

"I really don't know how to explain that more, but I feel like it's a more, maybe a more natural environment where everyone's more relaxed or, you can talk to someone more easily... Maybe that's just me, I don't know [chuckles] but I do get the feeling, I think..." (Participant 7)

"Even, I've got the dogs an that, there's always people walking about. "Aw hiya how are you doin'?" Cause in a caravan park everybody ken- gits tae ken everybody. [...] Well, just a face an that's it. [...] Mibee no ken their name, but you ken them by face tae say "aye hello, how ye doin', oh aye, seen you last night at the pub!"." (Participant 9)

Shared sense of values

"They- they, they'll start... You put on your- your armour, when you're out there (inaudible) because you're... you don't know who the person y'-are- in the city is. But, see you recognize a fellow... um, country person. So, you've got something in common cause you're walking in the- you're taking the time to walk out in the path and everythin'. So, you recognize that and eh, I think, why that is, I don't know, I've no idea..." (Participant 6)

"Dya know what I mean? Whereas in green space you're away from it all, like... I wouldn't say away from everyone because obviously there's other people an that there, but you don't mind it. [...] Dya know what I mean? Cause they're not there- cause they're no causing trouble or that. [...] They're just there for the same reason you're probably there." (Participant 8)

Solitary connectedness

"Erm, like for me it's actually quite nice if you're walking through on like a Saturday afternoon, and are some, like there's like a football match going on or something. Like, as weird as it sounds, having said that I need to get away from people, there's something quite nice about that kind of- feeling like there's something going on? Umm... and it's- it's nice to feel like these spaces kind of get used, even though I can sort of maintain my anonymity and stay sort of at the back and not really get involved." (Participant 5)

"So, as- even when I'm feeling down I've learned to sort of go out anyway. Em, and become sort eh... part-part of, just part of things without... so parks are good as opposed to just dressing and going to the library, maybe. Or things that're filled with people. You know if somebody talks to you in the library they might be giving you a chat for ages, whereas in- in a park or a green space it's just fleeting contact, so, it's contact without any commitment. [...] So, eh- [...] Um, purely from a- purely from a personal point of view, I think it makes you feel good that someone speaks to ya? Somebody smiles at you, because I- I think that good- goodwill is transferable" (Participant 6)

"So, em, there's no conventions in the park as- as such- [...] I suppose there is in saying, "good morning," and things like that are sort of conventional but there's em, there's plenty space to be yourself and... am not explaining myself exactly as I should, but- [...] Emm... [...] Yeah, I- I think em... there's the freedom but there's also, em, and this is gonna sound- independence is slightly different fro' freedom in that you're- you're... you're making your own decisi-, you're allowed t' make your own decisions without reference to anybody else at all. So, in the park, you're sort eh- [mutter] you've got this sort eh- I don't know; you're in control, I think. Uh... Ju- just your own, your own space. So, well you could carry your own space up here, in a big space, and you carry your own space that's not being sorta eh, uh, interfered with by other, uh, people. [...] So, even when they come close to us as I say, it's just fleeting. So you can, you can make that, you can invite them into your space and everything, but you've got the opportunity to not do anything, without feeling guilty about things, as well. It's- it's about, sort eh, being in control of your own space I think." (Participant 6)

"Yeah. I think it is 'cause I see a lot of people just s- sitting on their own. [...] Dya know what I mean, it's, it's like, it's really enjoyable. [...] Sometimes. Just being on your own, sit outside." (Participant 8)

5- Sense of freedom in Greenspaces

Sense of freedom in Greenspaces

Doing what you like

"And yeah, you're all there to enjoy yourself and it's just a very... it's kind of liberating in a way. [...] Just

the fact that you can sit on the ground, you can do pretty much whatever you want.” (Participant 4)

Oh yeah and also, uhm. Yeah about unwinding a bit... Uhm, is that, uhh, green spaces are quite unique in terms of you don't have to have a *status* to be there, you don't have to look a certain way, you don't have to... I don't know... things like, even wearing *shoes* or... and people tend to be more accepting of others, and you can see people doing *all sorts* of things in parks, and all sorts of looks and lifestyles and everything and everyone is OK with it, and that's not something you would see in some other environments.” (Participant 4)

“Well I think green spaces are important for young people; and- and that they can play sport. They can, eh... there's a certain freedom in green spaces (as well?). [...] That they can be themselves in green spaces. There's not so many laws about it if you know what I mean, so, there's [mutter] you know... [...] Less pressure. Don't have to be constantly weary of traffic and (inaudible) and they can relax, and play. Em, children love it, because again it's- it's special to them. It's, they don't have to be stuck in the pram or holding somebody's hands; they're allowed to run about and so, so green spaces is, I now- I equate with freedom. [...] I just think it's novel for them. It's, um, again it... it's a sense of adventure because there's a lot of things that uh- when you're stuck in a town and you take children in a green space, it's new, it's exciting and it's just, eh... and as I said, the freedom is the most important thing that they can get away with things...” (Participant 6)

“I really don't know how to explain that more, but I feel like it's a more, maybe a more natural environment where everyone's more relaxed or, you can talk to someone more easily... Maybe that's just me, I don't know [chuckles] but I do get the feeling, I think... Yeah. Also you can of course practice many activities that you can't in other places, for example, like I- I have a hula-hoop, so I can hoop there, whereas I cannot, you know, anywhere else, it's not very easy to- [...] Exactly, you can't do it everywhere. [Inhal] So, yeah we- I can see people with frisbees or people doing um... What is it they have? They do other acrobatic stuff and things... [...] Yeess exactly, because there is space and you can do anything, or tricks... [...] So if the ball goes somewhere it doesn't matter you won't hit someone it's OK there is space, so that's another good thing that you can yeah, practice activities. So yeah...” (Participant 7)

Getting away from life stress

“Yeah, being able to feel like you can actually get away from- from things. I think, if it was sort of a smaller green space I might not, maybe feel that way. [...] [Laughs] I've taught myself not to try and put myself in other people's shoes... [...] Decide what they think... But yeah, I would imagine that people, particularly people who, of maybe share my kind of mindset of wanting some time to just get away and, sort of escape themselves and other people [...] Um, sort of need [coughs] that kind of, bigger... [sighs] it's not really, yeah it's not really literally about a bigger space, it's just being able to get away from, the kind of the noise of life, I guess. [...] And if you could get away, you know the further you get away or the more sort of trees there are or whatever, you can feel a bit... a bit more sort of um, detached from that I guess. It's kind of a detachment thing.” (Participant 5)

“-it takes you away from the rat race that's- I've been living.” (Participant 6)

“Yes yes... but I feel a, this year, with so much, like, you know, academic work and... all the things running through my head and what am I gonna do afterwards? All the... it was really really a very heavy year. [...] And that did help. It was the place where I would go and just forget. Also, I love lying down and looking upwar- look upwards [laughs].” (Participant 7)

“I dunno I just, I find like... life throws a lot of things at ya and its sometimes just nice to go and sit somewhere and just... dya know what I mean, just *be outside*.” (Participant 8)

"Just for people that feel that, an, like, you know, that's got a lot of stuff going on and you go and sit in the field. [...] An you just look about, it's... it's nice. Dya know what I mean, it takes ya away from everything. [...] It's really nice. Just gets you away from everyone and everythin." (Participant 8)

6- Access to fresh produce

Theme 6: Access to fresh produce

Foraging

"I've thought of another benefit: blackberry picking (chuckles). [...] Foraging... my daughter came back from one of those... wild, nature wood- woodland sessions. I can't remember what, what it was, the name of the thing she was going on... telling me that, umm, what I used to call goose grass is edible. It's that one that sticks with the little round fruits, they call it sticky willy here (chuckles) like, she, but she ate too much at once and gave herself a tummy ache but anyway apparently it is mildly edible (chuckles). But I uh I love the idea of you know getting free food, so blackberries are the, the main one probably yeah... [...] Um flowers sometimes. Wild clover..." (Participant 1)

"So I also started, because there were fields, and I started you know picking blueberries and things so that- I really did get in touch with the nature [laughs]" (Participant 3)

Growing produce

"...but also, if you're growing your own stuff that you can use... it's fresh, you know what it is, and um... you don't have any packaging to worry about" (Participant 1).

7- Greenspaces as safety

Theme 7 : Greenspaces as safety

Safe Space for children

"You know- [coughs]. And it's where the kids are hanging out at the moment, they're not hanging out on the street corners or causing too much trouble or..." (Participant 3)

"-so, I think that's certainly an important thing. Um, [whispers] other people thinking about it... I would have thought that, if you've got a family, um having a green space is somewhere you're more comfortable, so just letting your kids run around. I can sort of- I mean, I don't have children, I don't know what it's like to be a parent, but I can imagine... I mean, for exactly the same reasons I guess, um, like in terms of like safety and, being able to just let your kids, go and do their thing... I'm sure that is a really helpful thing for them and for you. [...] Um, to just be able to take your mind off it for a while. You don't have to be hypervigilant of what your kids are doing. I can imagine that that's a really handy thing, to be able to do, particularly if it's near where you live; you don't have to walk very far." (Participant 5)

Greenspaces as transformative force in the area

"It would be quite a nice cover story and it's quite sympathetically done; they've planted a lot of trees 'round about <R Bike Park 1> as well. But it's sympathetically done, you know what I mean, it's not this, like, a tarmac hole. There is quite a lot of green space around it. Before <R Bike Park 1> came there it was a drug hole. [...] 'Cause they got 8 big black bags of needles and drug paraphernalia out that space before- before- before the diggers built the park to make the safe- the space- the space safe. [...] A big extent. Well, the fact that the kids are using it and I'm not saying all the kids are clear of drugs though 'cause they

can't get a population of teenagers and not expect some of them not to be using, but they normally getting like thir- that- that- that older men using in the area, you know the men go up in the bushes and do stuff that I really don't want to think out." (Participant 3)

8- Away from pollution

Theme 8: Away from traffic and pollution

Breathing easy

"... Of course the air is fresher it's, um, nicer to breathe, in green than urban places." (Participant 1)

"Yeah... but, try to be, you know spend as much as you can because you outside in fresh air and sun. If out, the suns out [laughs]" (Participant 10)

"On a practical side it's um... I'm aware that, em, we need green spaces for oxygen." (Participant 6)

"Well I think it's relaxing of course and then I think that it is - you get more oxygen so it's good for your health as well, though this is again a not very busy city but mostly this happens in places which are very polluted and then you get a green space and it's like a lung [chuckles]" (Participant 7)

"Dya know what I mean, like? Mibee they do that tae just... Just take stuff off their mind and just enjoy a bit of fresh air. In a nice area". (Participant 8)

Away from traffic and pollution

"Mm... mm... I think the best one's the, being away from the pollution- [...] one of the things. [...] Ehh... [...] Ehh... the away from the traffic. [...] Ehh... ehh... big crowd are like to the main street and the mainstream. [...] And also the, uh... away from the noisy in the place it's the... eh... People with addictions, especially the town centre like <R> with the... all of the types of the heavy addictions, yeah." (Participant 11)

"-you've still got this sense of there's a lot of people around you, that you're on a road and you that have be sort of at least aware of what's going on around you. Whereas I think, if you have a nice sort of green space, that's just- I mean, being quieter obviously helps, but- [...] you don't have to be as hyperaware of anyone walking around you 'cause there are less people walking around you. You can avoid... walking, sort of, on a main- I mean, there are, like yeah obviously there's many paths that go through it, but, you can sort of take your own route and just, go and look at something else. You don't need to be constantly thinking about how much traffic there is or whether someone's on a bike is gonna come and knock you over or..." (Participant 5)

"Well, the- there is traffic but it's like one road- [...] and you can't even hear the cars or nothin'. When you sit in that field you just... it's complete silence. [...] It's nice." (Participant 8)

Barriers

1- Greenspaces perceived as being boring:

Greenspaces perceived as being 'boring'

"But they don't care. Yeah, yeah, 'cause they're like... 'cause maybe it's- it's... [laughs] Maybe sound funny but I th- also think it's not, it's not *cool* anymore..." (Participant 5)

"Um, the boredom factor. [...] I find greenspaces a bit dull." (Participant 3)

"Not rea- well, a pub is a place, of- it's a service. [...] Where you can get *food*, you can get *drinks*, you're being *served*. You feel comfortable and convenient. When you go to green space you have to entertain yourself. [...] And that sometimes, I think for many people is... is a challenge. Like, what am I gonna do? *Okay*, I'll go to a park, sit down, well okay I can read a book for an hour. And then what? My friends will come along, okay we'll play some... I dunno... frisbee, we'll have a pint- well then what? " (Participant 4)

"Uhm... Cause, like, there are so many things that you can actually do by yourself in the park, but you don't have them in your head." (Participant 4)

Some people are "Goin' tae a park? The hef- effin hell do you want tae go tae a park for? It's boring!" [...] "Well hav ya tried it?" "Naw". "So go 'n try it fur me". (Participant 9)

2- Lack of facilities

Lack of facilities in Greenspaces

"Em, benches, the... the bins... UH...[...]Yeah [sighs], I think it's that... I thought about the toi- toi- something in the way of the *toilets*. Lack of the *toilets*. [...] Could be the *big* problem." (Participant 11)

"And then there's never any toilet -nearby. Toilets are another thing that you've got to consider when you're planning a green space. And the gent's toilets at the side of the meadows there are all shut now." (Participant 3)

"...like facilities- there's not that many of them and [hesitation] from one point of view I think it's a good thing, but sometimes you need to use the toilet [laughs]... so yeah that's a bit of an issues sometimes [laughs] but, other than that, yeah it's a great place." (Participant 4)

"And then, uhm, yeah, like I said before, facilities such as toilets just... basic things like that. You don't think that you need them but when you do they're *never* there. Like, there are almost no green spaces I've been to that actually have toilets [laughs]." (Participant 4)

"*Toilets*, in public places, ah believe would be good. Like you know, like they *box* things." (Participant 8)

3- Bad Weather

Bad Weather

"Umm... I suppose cold weather, well, let's be honest...[...]I know there's no such thing as bad weather there's only, it's only the clothes, but still..." (Participant 1)

"Suppose the trouble is the weather forecast being liable enough to plan it, that's the trouble isn't it..." (Participant 1)

"Yeah... 'cept for rain, coz they don't like rain and am not fond of it either so we're not as keen as going out in heavy rain, but yeah ah mean, snow an everything we're out... but honestly, you know - particular on a sunny day - it's, ah just love it, ah just, going out..." (Participant 2)

"Uhm, what else? Weather, I guess? It's not like a psych-, well it is a bit of a psychological barrier because if the sun is not out you can still go and probably enjoy yourself but its, *nyehhh*" (Participant 4)

"Uhh it's just... dunno when there is no the sun, the willingness to go to a green space kinda drops from 100 to a 50... and there is always a chance of it raining later and you're already there, what are you gonna do if it rains?" (Participant 4)

"I guess things like... th- the *weather*, up here, would be a bit of a barrier. *I know*, like, there's *nothing* anyone can do about, sort of, the *ground*, when it's wet and cold." (Participant 5)

"Yes, I think that it's something that does drive them to green spaces because it's, you know when it's raining of course you don't wanna go out." (Participant 7)

"And, also the weather, because we were talking Edinburgh, so yeah the weather is a restriction here. Not only the rain but also the cold because being <R Geographic area> [laughing] I get cold very easily, I feel the cold more than other people [chuckles]." (Participant 7)

"The weather. [...]Mm... I still go out 'cause it's always cloudy here [laughs] but a- the, um, we- um, by weather I mean when it's really heavy - heavily, you know like heavy storm or s- re- really heavily rain." (Participant 10)

"Uh... weather could be- weather could be the point, uh rain and the winter could make that difficult but not the... dependent on how much the person enjoying, uh..." (Participant 11)

4 – Poor Maintenance of Greenspaces

Poor Maintenance of Greenspaces

Littering and Dog Mess

"The more rubbish there is, the more will get left there so... having it clear in the first place seems to, help. Especially I think like fly tipping as well it's the case isn't it, people wouldn't risk it if they were the first to dump a mattress or something would they..." (Participant 1)

"Somebody was saying that there's a need for more bins, even general bins because people leave their, leave it in the bag sometimes don't they and, hang it up and stuff..." (Participant 1)

"...And dog mess- mess drives me nuts. Because I, I am rarely in a place where- well my children are a bit older now... if you have pre-schoolers and you don't have a piece of grass they can just sit and run... that's the problem with our back green it's not fenced off... [...]We never really let them play on it much because of that, we're perhaps a bit excessive about it but, if-just, if you've spent, if you've cleaned shoes or pram wheels once or twice you don't want to ever do it again (chuckles). Yeah, I dunno... (Participant 1)

"And there's a green space between our house and, and (street name) itself, I think a lot of dog walkers use it... that's, it, that would look, looks like a really good- to kick a ball around or something... but because I know that dog- people who don't really *walk* their dogs use it, I just discourage the children from going there..." (Participant 1)

"Um, and that sounds like a little thing but, it's something you *notice* 'cause the bins are at the exit and the entrance to where I walk in and out of the park. So, it's one of the *first* things and *last* things that I *notice*. So, I guess like in terms of like my attention, psychologically, that's quite a key...*primer* to how I'm gonna feel about it I guess. Um..." (Participant 5)

"An we used to go up, up through the woods an that and there was- was all nice tree's an everything. Go up there now an it's like all carpets, half wardrobes, bits ae gas cookers... [...]Tyres... *Everythin*. Cause they've just took it oot their hoose an dumped it across the road[...] Saves em getting rid ae it[...] So they're just *spoiling* it fir everybody else, eh." (Participant 9)

"Ehh... I wid think so anyway cause I- I certainly don't like tae walk along that path an see half a carpet, an half a cooker, an l- an auld bed..." (Participant 9)

"An everybody takes their rubbish an *dumps* it. Eh, cause there is some nice walks and, eh, some nice views when you go along tae <R Place 1>, ken like, some- further up the hill. Eh, an then you walk round the corner and there's- somebody's dumped their auld carpet. "The hell?". Just take it tae the tip, it's only along the road [chuckles]" (Participant 9)

"On the other- other hand, I would think that mmust be really done about, it's not just the UK stuff but probab- well, I would say *European* stuff, you get uh... you know like the, n-not just the children but most of them, maybe adults as well they just, you know, left their rubbish around the places, even if the, even if the *bin* is like *ten metres* away, so ye- it's easy, pick up, walk ten meters, and, you know, put it in the rubbish, they just don't do it... and you just *making me crazy*, you know." (Participant 10)

"One of the point which annoy me, it's like the, uh... lack of the... *litters* and the, uh, problems with the, some of the people which they're not picking the... all of the...*waste* from the, eh... their, the- the *time* over there. And also the dog poo; main topic at the moment, yeah." (Participant 11)

"I think it's the quite possible to notice that it's the... eh... the- a lot of the people without any kind of the sense of the behaviour. They're damaging the area. A lot of the... takeaways around <R Park 3>, a lot of the *litters*, the *dog poo*, there is some *problems*, yeah." (Participant 11)

Maintenance of space

"In <R Park 4> you've got to go to public toilets which are dodgy as hell. [...]And not always clean and... yeah." (Participant 3)

"I think, the only *obvious* thing that I can really say is how they're sort of *maintained*, and that's *not* to say that it depends on how nice it *looks*, it's just about things like, the amount of sort of, like if you get- there *are* some parks where you get quite a lot of *rubbish* gets just left there. People are fly tipping, and stuff like that... that's *obviously* a thing that's gonna to put you *off* wa- sort of, walking through" (Participant 5)

"Eh... I don't know what- what you can do about green space... You gotta keep, well, you've got to *maintain* it. So, if it's *maintained*, which is uh, probably the *biggest thing*" (Participant 6)

5- Time Pressures

Time Pressures

Lack of Time

"So, my children would like to go more often, but its just fitting it in." (Participant 1)

"so um.. honestly my, 11-year-old daughter is always saying, "*when* can we go up Arthurs Seat?" If we were here all summer it would be different we would be doing that kind of thing, but in the term time it's hard to find that spare afternoon..." (Participant 1)

"Ah try during the week to get you know maybe get once or twice out during the week but not as often as ah would *like* really, but it's just really work dependent." (Participant 2)

"Ehh, probably work really and, you know, other, you know. That sort of, that - these commitments that... work ah would say, an' being t-tired when ah get in an stuff like that..." (Participant 2)

"I think the *biggest* barrier to be using green spaces is *time*." (Participant 5)

"I think the biggest problem [laughs] if you were to ask people like why don't you use- you know *why* don't they go to the park more or why don't you [inhales] go for a walk or whatever, the thing they'll tell you *most* of the time, is that they *don't* have *time* to. Um, I don't know how that fits into like the whole kind of questions that you're asking or how it's relevant, but-" (Participant 5)

"I- ah think the *barriers* are, em, well, life- life's a *rush*. So, people think they've not got the *time*." (Participant 6)

"Well, one thing is time. So, if I had more time I think I would spend maybe *double* the time." (Participant 7)

Deprioritisation of well-being

"it's about prioritizing" (Participant 1)

"Uhm. It's something I would like to prioritise more [...] I can't say... it's just something that never really... gets into my head as a first option [...] It's always like, we're on the... we're already walking, just met friends and then we discuss that several options, and probably one of them would be going to a park and then we're there and it's great but then next time it's never like, "oh we should actually go to the park right now". (Participant 4)

"Um, I think people placing value on their *time*... is probably the biggest barrier to like, getting the *benefits* of using a green space, and I think one of the reasons why I prioritise it is because I'm *used to* doing that. I think, like I said, sort of in terms of growing up and stuff, I *know* the benefits of having... you know, fresh air, quote unquote. Um... [...] I think people tend not to value their own health if they have more pressing issues about their own circumstances. So, whether that's health or finance or... [inhales] um... families- you know, single parent families are *insanely* busy. You know, parents who- I mean, I see quite a lot of parents prioritize obviously *everything* else except for their *own* wellbeing. Cause that's the only, like, allocation of their own kind of attention that they can really give. Um, I don't imagine it's easy to switch off, particularly if you- you know, you're up against it with trying to make ends meet." (Participant 5)

"I think that's- and that's not just about, you know, um, exercising more or using green space, but that's

generally a *cultural* issue, *particularly* in this country. I can't really speak for anywhere else; I think we've become almost sort of socialised to believe that... priorities- our first priorities are not our own wellbeing. And that's something I think quite strongly when it comes to sort of mental health, in my experience in *that* side of things, like both professionally and personally." (Participant 5)

"I mean to be *frank*, like, I... I'm of the opinion that... perhaps not *deliberately* but sort of, *systematically*, people are... sort of socialised to *not* prioritise their health and wellbeing I think." (Participant 5)

6- Psychological Barriers

Psychological Barriers

Lack of motivation

"I love the walk but I kind of, I really have to... m-make myself... give it time, give time for that." (Participant 1)

"Emm, ah know ma friend sometimes she lives in a tenement in <R Place 8> and she- if it's a really nice day I'm like, you know, she's not left there because she just can't be bothered movin' an, "*ogch nahh*", she doesn'y- you know?" (Participant 2)

"Uhm. Well the first one would probably be laziness. [...] Sometimes it takes a while, takes an effort to get to the place and then if it's a hill then there's some climbing involved and you're, kinda, I'm not prepared to do it now, I don't want to, maybe next time." (Participant 4)

"A lot ae people (exhales)... Don't know about the other areas o' Edinburgh but it's probably mostly the same. A lot ae, a lot ae people roond about *here* are, are *unemployed*, an they're, suffered *depression*, an they've just, no got the motivation." (Participant 9)

"It's... I think it's more lackin motivation- [...] -an depression really. [...] Cause they're no got anything to get up for in the morning tae look forward to so there's... what's the point of goin' on a walk? [...] Am still no gon be able to git a job or money or that... Whit's the point ae goin' on a walk? But they dinnae actually realise, well... I se- I uh... I used to be the same mibee... 10, 11 year ago. I wid sit in the hoose all day an no go anywhere apart fae the shop an back again" (Participant 9)

"Ahh I mean yeah [laughing]. Unless, nah, I mean, this is so obvious. If you ask somebody why would... What's the benefits for... you know, why would you choose to being outside playing football, for instance, than stay at home and watching TV. I would say that people would know why it would be, you know, go out and play... [...] Um... I would say the urban generation are lazy. They are no-not motivated, I dunno... So they have no motivation, in life. " (Participant 10)

"Umm... I would say that motivation as well, I have that as well, like uh, so you do like a, try for t- an hour or probably, bu' you know..." (Participant 10)

"... You *have* that, you *have* that, but you know, people don't wanna, people don't *care*, about that, you know, so they have to find, unfortunately, [coughs] they have to, you know, you can't really motivate them 'cause they have to find that inside of them... 'Cause, you know, they have the chance to do it and it's for free [chuckles] They just not motivated." (Participant 10)

Lack of interest in engaging with Greenspaces

"I suppose if you're not used to it, it might be fear of the unknown." (Participant 1)

"Emm... I just wouldn't have thought of going out for a walk on ma own, you know ah think thats a barri... you know people just sayin', "oh fuck off, why would ah do that, you know? Unless am actually goin' somewhere", you know, just for goin' out for a walk for the sake of it... so..." (Participant 2)

"You have that, you have that, but you know, people don't wanna, people don't care, about that, you know, so they have to find, unfortunately, [coughs] they have to, you know, you can't really motivate them 'cause they have to find that inside of them... 'Cause, you know, they have the chance to do it and it's for free [chuckles] They just not motivated.

Interviewer: "Yeah... So you think, those programs and activities exist but you don't think it encourages people to go outside more?"

Participant: "Yeah.[...]You get the leaflets you know, going out all around and you can read it you know like - ah we're ha- having a- a public gathering or, you know, activities or range of stuff and uh... um wha- you know uh, for your, um you know, and this stuff's all free, people just, don't care. You get the leaflets you know, going out all around and you can read it you know like - ah we're ha- having a- a public gathering or, you know, activities or range of stuff and uh... um wha- you know uh, for your, um you know, and this stuff's all *free*, people just, don't *care*." (Participant 10)

"Well... maybe someone, I dunno, doesn't *like*... being outside? [chuckles]" (Participant 7)

"Well, I dunno if we can do something about it because, no matter how many, you know exciting activities you propose and how many... attractive leaflets you might create or design [laughing] if someone, doesn't feel like it, I don't really think that they will, you know, be *impressed* by it..." (Participant 7)

"Pff... Hmm... Laziness an just probably canna be bothered wi the place." (Participant 9)

Crowds when seeking solitude

"Busy-ness for me is a barrier ah don't like in busy sp- green, ya know, ah don't, green space. [...]Ah like sort o' the big green space where there're not, ah- too many people" (Participant 2)

"You go to the open spaces, dya know what I mean, there's- there's always *people*. [...]I mean, maybe some people feel funny to do it because of the *amount* of people that there is. I mean a few time a've went and I've been like "woah there's loads of people here, I'm just gonna *leave* it today". (Participant 8)

"Uh... mm... most- I think that *overcrowded* places would for me, could be the- eh... if there is a place with the lack of the... uh... there is the room. Uh, lack of the *space*. Eh..." (Participant 11)

Not knowing benefits of Greenspaces

"What else would they face? Emm... Maybe not knowing about the *benefits* of, ya know, what ya can get out of it an...[...] ...and how it's, yeah, yeah that'll be sort of like a knowledge of benefits of, getting out there, an', mm..." (Participant 2)

7- Safety and Security Concerns

Safety and Security Concerns

Fearing anti-social behaviour

"And there's people there... I've found it a bit scary when people are dashing around on those uhh bikes... motor bikes they're not supposed to be on, and-" (Participant 1)

"sometimes kids get hold of bikes then (inaudible) ride them with no helm- crash helmets just... zoom. Umm. I suppose that might... that sort of thing might put people off" (Participant 1)

"-and there's also, well, <R Park 7> used to be quite bad for people sniffing glue and everything? [...] So, you see all the bags and that sort of... and that em, puts off people with families and children and everythin'. So, eh, I think that families might not go to a park if there's- if they perceive that's there's a- an unsavoury element within it. So, so I don't know if that applies to certain parks in Edinburgh." (Participant 7)

"Uh, I think the... uh... some of them, they are under addiction, you know they are overdosing something- something is looking quite scary for the people around them. Uh the needles, the bottles, the... uh... the pets and uh... sometimes the vomit... [U]h... I think the, eh, it's not a problem of the, these people... because there is... if they are in the normal state of the thinking, but if they are in the addiction, some of them looking like the dead, like on the grass- [...] which making the weird outlook that- people with the tents- the sleeping on the... it's quite, uh, uh... it's quite brutal view of the... uh, how it's looking situation." (Participant 11)

"In the Europe, especially in the <R>. Eh... that there is the big problem with the, uh *safety* in these places. Cause there is a lot of the homeless people without, the, uh, ID... any form of ID's even! Some of them in the addiction, some of them in the heavy crime. And, eh... it's might be the problem growing up in same like situation in London that um, all or the some of the park- it's quite scary to go because the, yeah, there's people under addiction, the- they are in the same kind of the way the- the- the thinking. Yeah..." (Participant 11)

Security concerns

"I've just thought of another barrier - in the past I was more cautious before I became more familiar, I think before they... when did they build the <R Park 1>? I don't know... I remember thinking would I go there on my own? Is it safe?" (Participant 1)

"I wouldn't go in the dark... on my own..." (Participant 1)

"We were there once with a group from the school, and I wouldn't have known this, but a teacher found a very suspicious package which she thought looked like drugs." (Participant 1)

"Yeah and I suppose things like broken glass and dangerous litter, might cramp your style if you wanted your children to run barefoot or your dogs or, well yeah for dog owners that would be... a consideration" (Participant 1)

"It might sort of knock o- have a knock-on effect, or it might be related to things that are also relevant, sort of during the day or at times when otherwise you would maybe *use* it like if... if there was this perception that somewhere *isn't* safe, even if it's just *night*, you're probably less likely to use it during the *day*. You'd find an alternative or you'd just not- yeah, I think you'd just not *use* it. Um..." (Participant 5)

"That's <R Place 11> down there, ey? There has been a few incidences at <R Place 11> and I was like, well I'm no going there again. [...] But a have. A few weeks later I've ended up just going again. [...] Eh, there's actually bin quite a few situations down at that <R Place 11>. Ehm, but I know now there's like a... there's a patrol guy that goes round?" (Participant 8)

"Like, people being attacked and stuff. Robbed, and stuff like that. [...] Yeah, yeah I think that would stop people from just going and sitting and relaxing there, they'd feel that they'd have to go at certain times."
(Participant 8)

8- Accessibility of Greenspaces

Accessibility of Greenspaces

Disabilities and poor health

"Emm... maybe for a few folk around here as well so, you know, so ya health and, general... you know? Maybe a barrier." (Participant 2)

"Which- It's a lovely- It's a lovely... but I've only visited it once! And sometimes I'd like to be able to go a bit more often, just to visit the tree there again but accessing it... you'd need a- well, you'd need a good half day to get there and set up a picnic" (Participant 3 – in the context of their own disability)

"Well, I'm thinking that well, friends with disabilities that I have got, they struggle with accessing."
(Participant 3)

"Yeah... obviously things like the paths I was talking about earlier. If you are someone that has a physical disability or, you know, like physical issues... that's a fairly *obvious* reason um, for you to avoid using somewhere like that if there isn't like a... at least *one* accessible path through somewhere, or you know, one way of getting in. Like I see too many... I mean there's too many places in- in <R Big City> particularly where they try and stop people going through on their bikes but what they inadvertently do is make it inaccessible for a wheelchair." (Participant 5)

"Em... well some green spaces are difficult if- if you've got a disability. So, some spaces are hard to get to. [...] You know, like, you can't go walking up... s- um, round- round the park, round the <R Park 3>. You can do <R Park 4> 'cause it's flat, but there's other places- and there's easier access" (Participant 6)

"Ehh... Apart fae mibee a- a disability, mebee if they're in a buggy or one ae disabled scooters, cause some of the paths an that, it's... [...] It's bad enough trying to walk on them never mind trying tae get a buggy or anything like that up them. Or if you walk with a stick an' that it's all uneven." (Participant 9)

"Ken, it's no... widnae be suitable fir your granny who's 70 year old to go up wi er walking stick."
(Participant 9)

"Just like mibee stairs, or when you get some parks you go intae and then you have to get like 3 steps to go up tae them. If you're on a disabled buggy" (Participant 9)

"Ehm... but apart fae that, still like going outside like, 'cept cause I cannae walk as far now 'cause I've got crepitus in mah knees, eh. [...] Eh, but when I was younger, maybe 20 years ago, ah'd walk- I widnae think walking fae- twice, walking fae here tae... F- Gorebridge." (Participant 9)

Distance to Greenspaces

"It's a bit too far to be actually... um uh, just feels that, <R Place 2> is about 25 minutes to get there on foot." (Participant 1)

"We don't manage that. And again, I think that would be different if it was a 5 minutes' walk. But..."

(Participant 1)

"Umm... there, uh, the Botanic is amazing, as a special outing coz it's the other side of town..."
(Participant 1)

"Um... uh um... we can get there easily so, um... if I had - felt I had to get children on a bus or in the car that would be a barrier-" (Participant 1)

"Uhm, well again, as a convenience there is a park close to our best friends' which is along <R Park 5>." (Participant 4)

Not being aware of local Greenspaces

It's - it's, just over there, it's em, you would, you wouldn't know it was there on, it's, you know, it's quite well hidden. Especially just now coz the grass is quite high, so it's kind of back o' <R Place 7>, sort of, beside the <R Hospital 1>, yeah, so there's lovely marshland there and it's - it's waters quite clean and... it's lovely, it's worth havin' a look (laughs)" (Participant 2)

"Em, people don't know- there's um, there's *loads* of green spaces in Edinburgh that people don't *know* about. Like *walkways* and things like that, and small *parks* all over the city." (Participant 6)

"... there's always encroaching and things like that. But, I know there's a lot of parks that people don't *know* about because they're all hidden behind *buildings* and things like that so..." (Participant 6)

Rental use of Greenspaces

"Sometimes this place, they are- uh, *rented* for the some kind of the *events*. And it's not possible to be around" (Participant 11)

9- Service Provision and Lack of Investment

Service Provision and Lack of Investment

Lack of Investment in Greenspaces

"... that there's a lot of talk that public services at the moment and how much funding or how little funding is coming in from central government and how taxpayer money is used. [...] But I think there definitely has been... actually, other pla- I- it's not as bad here as I have witnessed in other places; particularly down South... I think in urban areas in the South of England. <Refers to South West of England>, down there it's definitely an issue where there is just, I mean, it's one of the more deprived areas of the country and there is no real funding for... things like, green space. You know, it's not a priority at all. And I think, there has been a move, sort of where, local authorities kind of have less money available. They're prioritising services rather than green space and I think that there is a circle to that." (Participant 5)

"more *investment* from, kind of [whispers] (it's a hassle...) but where d'you raise the money for that?" (Participant 6)

"And they try to- they try to promote green spaces. [...] Em, so they're coming from an ecological point of view, about doing things as well, so but em, there's... minimal funding for what they do in Edinburgh, you know? .. (Participant 6)

"Ehm... But that was 2 or 3 year ago but that, that just stopped, that. [...] I reckon it was... It was either they run out ae funding, which is probably mae- more than likely, or just naebody turned up. [...] [exhales]"

Hmm... Apart from approaching the council and asking them, but they would just say "aw, we'll get back to you, we'll get back to you". It's funding. It's all comes down to funding now-a-days, eh." (Participant 9)

"Now, it seems like because of the... eh... somehow cost of the... eh... taking care of the green spaces in the... and in the Edinburgh- I think it become cut down. [...] That's why it's like the main problem at the moment. [...] And they cut down the eh... the amount of the cash which heading towards the green and waste management." (Participant 11)

Interrelatedness of needs not recognised

"I'm sort of skirting around the issue a little bit but I think... I think there is a slight kind of, social perception that, there is *no need to*... sort of *divert* what is essentially tax payer funding, towards things which are not a priority. So I- I think, if you were to say to people "We want to" you know, "your council tax is going up because we want to make more green spaces," they're not going to react as positively to that as if they said, "your council tax is going up because we need to make sure that enough people can access the NHS." I think that people would probably feel a lot *more, amenable to that*, than being told that their money is going towards, the things which they don't, you know, they don't *actively prioritize*.

I think, if you *really* kind of got people to sit down and- and look at things and say "look- this is all kind of interrelated. Like this is, you know, it's not just about *services*. If we can't just- it's not about prioritising one thing over another, like these are all related, like the more green spaces we have the more *ac-*, you know, the more active people will tend to be, the less they need NHS services". And the whole thing comes 'round in a circle, but I think we- as a society have, for a number of reasons- I'll try not to get political about it because it's actually *not relevant* necessarily, 'cause I think it, you know- you could look at it in many different ways." (Participant 5)

"Um, and I think it's because... there *has* been a bit of a squeeze on living standards and people *naturally* will prioritize things which are more, sort of, *concrete* and like, you can really put a sort of *value* or at least kind of *psychological* value or priority on things like, you know, like I said- access to- to services and, the cost of living. Um, into like, particularly if you have a family, for example. Like you're not gonna- you're gonna look at where you can access decent schools and medical services rather than where is near a park." (Participant 5)

"Um, and that's not just limited to... [inhales] y- whether you live near a green space or not or whether, you know, the council pays to empty the bins. That's- that's not a direct relationship, but I think... I think that more... I guess what I'm saying is I think... there's this kind of cycle of prioritizing some things over others more and more. And actually, it's kind of a self-fulfilling prophecy where you end up then needing to prioritise more and then end up diverting money and more and more money is taken away from, sort of incrementally gets taken away from *other services* and *other things like green spaces* and other- *other* things which I could go into, but I won't [chuckles]" (Participant 5)

"Um, I think it's because there's this kind of bizarre public perception that... anything beyond like the *immediate* needs that are really *obvious* to see, like things like health and police and things- anything *beyond* that, is essentially a *luxury*. It's not a *requirement*. When actually I think they're all interrelated and they all play into each other. So, like, the more green spaces you have, the more active you are, the less people need health services. Or, you know, *particularly* with regard to like psychological services, which are underfunded *anyway* because people don't prioritize their own mental health and you know, wellbeing and all of that. I think people... because they, you know- uh it's- it's not everyone, but-" (Participant 5)

"But I think- I think there would be a lot of long-term benefits to doing that though. Perhaps that are not prioritized, I think a lot of- certainly from what I've seen from professional experience from the local

government, budgeting is done on, essentially, things that get you, either re-elected or give you something that you can show that you have done, and that tends to be kind of short-term. [...]

So, we tend to sort of drift away from things which are more beneficial long-term, so this would definitely be on that side of things. I don't think there's obvious short-term things that you can sort of say benefit people from using a park more, you know, um... I think that's certainly something and then obviously just the stuff we talked about earlier" (Participant 5)

"And if- if you've got an opportunity to be out and about and, as I say, gives people a better quality of life, makes people happier and healthier and all the rest of that. And so, in the long-term, it's... there's hidden benefits you know. [...] Well, it's- I mean, it may be small things, but I mean, if people are out and more active and everythin, there's- there's less pressure on the NHS, there's less pressure on the doctor. Em, there's um... [sighs] there's- there's less, eh... people are better behaved." (Participant 6)

"Eh, so there may be less... pressure on the police force or things like that? Em, I don't know, people grow up better adjusted because they're used to- they aren't bein stuck in the house. They're a bit more sociable, so if you're stuck in the house it's hard to be- become, uh, [mutter] ma- mature fully in to sociable adults; somebody who actually is- is part of society as opposed to somebody who's in society but not a part of it." (Participant 6)

10 – Availability and use of technology

Availability and use of technology

Technology use in greenspaces

"Uhm, I sometimes do... but I'll always feel like I, "I dunno what I'm doing here," when I'm alone. [...] I usually do it when, I dunno, I don't have any money to go to somewhere else but I'm waiting-[...] -for, I don't know, my partner to finish work, and I'm just sitting there, and I end up just... scrolling through my feed, and what's the point in me actually being in the park then?" (Participant 4)

Preference of technology over greenspaces

"And also you know like people, I fink in now, in 21st century, they like, you know you can- no offence to Edinburgh, but they becoming zombies. So, you can see people walking [laughing] without take a-a look around - what's happening around - and just walking and playing in the mobiles, right? [...] Or at home and watch TV and everybody do that so... and, you know, I think that's kind of the poison of our generation." (Participant 10)

"... to, have a ball and go outside... and have a huge personal TV you know, with uh, 600 channels so... it sounds cooler - "I have a huge personal TV... 3D, glasses, let's check out". How would you j- go out to play football..." (Participant 10)

"Ehm, I don't know, parks just imae really popular anymore, I'd say. People would rather do other things. Like hold their tablets an phones an... [...] You know, all that stuff." (Participant 8)

"When they're at their own hoose, no, that's it. Computer. [...] They just sit there like that [mimes]. Usually, when I go up tae their hoose an go in an they're sitting on the computer I just walk in and go "tchh", turn the telly aff! [...] "Whaaat!" [laughs] "Git ootside!" Nice lovely sunny day and they're sitting in the hoose playing a playstation... [...] When a wis a kid when it was sunny when you got up in the morning, at 8 o'clock in the morning, an it wis the summer holidays you were oot, oot all day. Comin back at tea time whin your belly was hungry" (Participant 9)

Proposed Solutions

1- Organised community events and activities

Organised community events and activities

Organised events and activities

"So ... s- if, if um... things that targeted particular groups of people...[...] Things like the buggy walks are good aren't they... or, slower walks for elderly people, things like that." (Participant 1)

"Ehm, ooh. If there's some kind of an event-[...]in the green space, the park or anything, that I'm really interested in I will obviously go.[...] And then I will probably remember the place and I'll revisit later." (Participant 4)

"Uhm, no, well yeah, some activities or events, they don't have to be like on a constant basis but just... [...] Uhm... even probably like free runs or... The perfect for me would be board games in the park where everyone can join and just play some board games. Or, I dunno... markets. [...]Yeah, things like that. Or even just meet ups, I dunno. Social meet ups."

"Or... things like festivals, or anything that is organised... but again for me this is not very representative, because the <R> festival for example that was a crazy day, a couple of crazy days, that's not <R Park 4> that I am used to and that I enjoy... so maybe this could attract people on the one hand, yes, could be a way to overcome the barrier." (Participant 7)

"Also I'm thinking that there are group activities that can be, done, in areas like that which are not that noisy also. [...] For example, there was a yoga class, that's totally silent almost, you just have the teacher say- you know, explaining the Asanas, that's nothing [...] It's really really... calm and relaxed. Or if, if it is... some people just, maybe, practicing... something which is not music, anything else... it's not that noisy [...] Or if there is a group of people who are reading a book together and then having a discussion, that's quiet. (Participant 7)

"Maybe more like, like if someone was to set something up like... playdays. [...]Dya know what I mean like, but not just for kids. For adults. [...] For just everyone to go along and get a game ae... rounders or something.[...]Dya know what I mean? [...] I believe that would be really nice.[...] I would be fun. People would meet new people, dya know what I mean? [...] Make new friends. (Participant 8)

"Ehm, like events, if ya get me? [...] I- I- I think people would go to them a lot more if... people say "oh, there's a funfair coming up" or whatever.[...] Or something like that. Or "oh, there's a big game of football coming up, I'll go and participate in that" for charity or whatever." (Participant 8)

"Ehm... I dinna know. Like, I've got my reasons for going to green spaces [...] Ehm... But ah feel I'd go a lot more if there was more to do. [...] Dya know what I mean? Like, physically more to do. [...] Ehm, I feel I'd use green spaces a lot more. Especially around here." (Participant 8)

"Eh. Just tryna think. [pause] I knew a few- I, mibee 3, 4 year ago there wis a sign up... in the front office here about a nature walk, I think it was every Wednesday. [...]Wid, mibee like, a group o' them would meet up and they'd take a walk up through the woods an they'd point oot aw different kinds o' trees an animals an that, like for folk who's actually interested in it." (Participant 9)

"Something like that eh, just... Ehh... Just tryna think. That's about the only thing I can think, mibee like a nature watch tae, eh, point out all thae different trees an animals an..." (Participant 9)

Role of systemic structures in promoting greenspace engagement (e.g. schools)

"...which is been allocated to the primary school children. So if you have a child at the school you can... and you want to take your family, you can use plot there..." (Participant 1)

"But also, through children... if the children, I'm surprised, I have been surprised how little used the, that <R Park 1> is. But the last few times I've been passed there've been more families there having BBQs and things... or well maybe picnics I don't know... with lots of children and everything but, it's, you don't exactly drive past it, you might not even know it was there, but bec- I think things like the school taking children there as a- a reward trip which they do sometimes, then they might come home and tell their parents about it, and, encourage their whole family to go there perhaps. [...] Um... oh I can- other activities, there's that really good... the magical... walk... organised by a group whose name I forget, who do things like walking on stilts and [...] Uh huh and they're good. They're um... it was publicised through the school, I think the, the thing they did with the, I think the magic they did- it was called a magical woodland walk and they were in character as these pixies and things- [...] And you followed them round the woodland and they had things set up like, a trapeze hanging off an old tree and pretending to be fairies and things like that... it was very well done (chuckles) but there were a whole lot of us traipsing round with our small children, thinking, "oh, I've never been here before, it's really nice," (chuckles) and you know it's that sort of thing that gets families into spaces for a specific reason [...] They might - then they might be encouraged to go back (pause) because that was more from a ...uh ... I mean you might expect a nature walk or something but that was more from sort of theatre ... angle..." (Participant 1)

Having things to do in greenspaces

"So, it would be nice to have... I don't know... not a website dedicated to it... [laughs] [...] But... Uhm... Like some kind of a list that I would somehow find that would tell be about all those things that are very obvious that I should have thought about myself and never did. [...] And be like, "oh yeah! I could... dunno, make this wristband sitting in the park." (Participant 4)

"Maybe just the fact that, I dunno, mibee some people would like more to do in green space." (Participant 8)

2- Better kept spaces

Better kept spaces

Regular maintenance is needed

"So, if you're walking in and you're thinking "oh, you know, the bins get emptied and it's not dirty." And you think the same thing as you walk out, obviously you're gonna have a better impression of where you've been and you're gonna feel more positive about using the space in the future. Um..." (Participant 5)

"Participant Yeah that's definitely... well, I think... like I mentioned already, like making sure that just at least the sort of basics are maintained well. Like, you don't need to spend loads of time or money making things look perfect, it's just sort of making it- it count." (Participant 5)

"Um, or you know, trying to make it at least, you know, safe and accessible. You know, I think that's... [...] And maybe clean, is just sort of the basic priorities that need to be done. I don't think, there's necessarily- I think there's kind of diminishing returns if you were to try and make things... perfect. I don't think that necessarily brings more people into a park." (Participant 5)

Role of community in maintaining greenspaces

"But it's- if it's not in their area people are unaware of it, em, they us- they, some of the parks used to be quite mucky, but it's a lot better now, I think [...] So, I think some of the parks are, are, nice- looked after a bit better maybe- [...] by all local sort of committees and things like that." (Participant 6)

"And there's a Friends of- there's <R Park 6>. The men there- there are people who are 'round and they pick up stuff. And I know they do stuff with the <R Park 2> as well. [...] So there seems to be eh- wee groups and that who actually start to realize that we need to keep- to maintain it, otherwise it's not nice." (Participant 6)

More facilities in greenspaces

"I suppose in sort of, places, maybe a sheltered place to have a picnic might help. They have that at the allotment which is quite nice." (Participant 1)

Aand... uh... How you call it, how to call it in English uh um... like outside work outs? D'you know, you, like... [gesturing - outdoor gym] [...] Yes, that's what I'm thinking about I miss here... that's really so many - they only have kind of uh, something like that here, but it's not... [...] Yeah... like one activity and maybe that's all... [...] That's what I was like missing the most, many of them here as well, 'cause you know, I f- I found none so, that would be amazing to have it." (Participant 10)

"Uhm, well for example if there was an area somewhere in the park with just, I dunno, those massive umbrellas, like a gazebo" (Participant 4)

"Uhm, I think so yes. So, for example if it was... a park, uhm, that already has... like, not a completely wild park, that already has a playground... in it. So, it's quite a civilised one. It would be nice to have like... kits for hire. I don't know. [...] For those activities. [...] Like badminton or frisbee or... dunno, some card games. Something, yeah... something like that." (Participant 4)

"Dya know what I mean? Like... Ehm... I ken <R Park 13>, just over from it, they've got like a wee- a wee gym? [hiccups] [...] And it's an out- out sorry- outdoor gym. And it's like, everything's like stuck to the ground so no-one can like try and steal it or anything? [hiccups] [...] Ehm, but that's, that's quite good that. I see a lot of people using that. A lot of people. [...] Ehm it's like a wee, wee outdoor gym and it's pretty... pretty nifty. [hiccups]" (Participant 8)

"I mean, I know, like, at <R Garden 3> and that, like, there's wee benches that've got like an inside bit. People can just go and sit in them. Dya know what I mean, it's nice. [...] I find that nice for people that just want a wee bit of privacy. Dya know what I mean? [...] It's that sitter in the wee thingies. Like, they've got, like, wooden things outside them. [...] An it's got like shelter. People just go an sit in them. [...] Aye. I think there's only two or three o' them. But they're nice. They're nice wee things." (Participant 8)

"Like even, like, an outdoor gym or something [...] With all the appari-apparatus or whatever it's called. [...] Apparatus... Ehm, because I know at <R Park 13> they actual put it into the ground. [...] Ehm, on a surface. They bought a surface and put it ontae it, so no-one can steal it. [...] I found that a pretty good idea. They get used a lot. But, I mean at the same time it would put- it would probably put normal gyms outtae business. Because that's an outdoor gym and it's free. [...] And it's got all the equipment, honestly, it's the- the things that you do that [mimes], there's like a running machine, eh, there's like a pull-up thing, honestly, there's everything." (Participant 8)

"I think if was, like, more picnic areas, I think more people would actually go up an..." (Participant 9)

"See cause down at my brother's caravan, like halfway up, eh, through the woods, it's mibee about a mile an a half up the woods, there's like a big massive area but it's got three barbecues aboot, they've actually built the barbe- the caravan park's actually built the barbecues so if you want tae go up during the week- [...] or during the day or whenever, you can go up there an have a barbecue, cause the barbecues all there you just need tae take ya stuff up. [...] They've even got a fire extinguisher and everything just in case. [...] An it's the middle o' ae wood [chuckles] [...] So it's well organised doon there, like." (Participant 9)

"But then if there's... "och, am no going up there, there's nuthin' up there". [...] At least if there was a, maybe a picnic area or something like that people would actually start going intae it" (Participant 9).

3- Increasing safety and security of greenspaces

Increasing safety and security of greenspaces

Better lighting

"Lighting on paths has been done, hasn't it... um... I suppose the more it's used by normal, people, as part of their daily lives, the safer it feels..." (Participant 1)

"There's not a whole lot you can do, so having a well-maintained path or at least some sort of path that is, um, walkable and usable when it is dark. I think that's also quite important. Even if you, you know, you wouldn't necessarily um... like, really go out when it's dark to go walk through a green space, but I think if it's somewhere on your route, particularly having- I've been using it on my route home, and there have been times, because it isn't that well-lit, that I have actually chosen to go on the road, when it's been particularly dark. Only really when it's been really late." (Participant 5)

"And I think that's, you know, that's a bit stereotyping, um... but that's- that's one of those things that sort of happens in <R Big City> and you do just naturally just, use places that are better lit. I think that's something you sort of just get used to. And I'm sure it's not just <R Big City>; I'm sure that's most places. Um, so I think maybe- maybe if- yeah, if it's not well lit you're obviously not gonna feel as safe walking through it- [...] when it's not, you know, light or when it's late at night or whatever..." (Participant 5)

"Participant Which it would be nice to mibee have some lights down there like late at night an that. For, like, when people who do want to play football late at night. But it's pitch dark, you can't see nothin'. [...] I think people, like, think that people want to do things all the time during the day? [...] Dya know what I mean? When it would be nice to go out and get a late game of football, but we can't cause it's always dark." (Participant 8)

"Yeah. That would be nice, light the place up a bit at night time. [...] That would be really good for people's security as well, ah think. [...] So mibee not even cameras, mibee just lights. [...] Dya know what I mean? Like lighting the place up at night?" (Participant 8)

Security Personelle

"...It's about restrictions, eh? And um, like so, you don't want too many restrictions, but you got- also got to- when people are abusing that, you've got ta sort it out... so that's why I said the park keepers, they kind of "you cannae do that son, cannae do that", so, ya miss them a wee bit, um... I don't know. It's a- see, living in Edinburgh I- I, it's naw, a- as- they've disappeared a little bit but there's plenty and plenty o' places in Edinburgh." (Participant 6)

"Ehm, there's actually bin quite a few situations down at that <R Place 11>. Ehm, but I know now there's like a... there's a patrol guy that goes roond? [...] Ehm, which ah think it making it a lot safer. [...] A 'park

ranger' or suttin, they're called. Park rangers. [...] They're really good at doing their job cause every time I go over that field ah see them. [...] Driving about. So, I think, I think it's for that reason, that there's been some problems doon at <R Place 11>. I- ah think that's why they're there. [...] Just to make sure everythin's OK" (Participant 8)

"Pe-people on foot mibee. [...] Ehm, I'm no saying police cause I know that they don't have time to do that. [...] Ehm, but some sortae other service. Like... I dunno, like [yawns]... Ah ken you get, like, the park rangers an that, but- but they really dunna have any place apart fae that" (Participant 8)

Installing cameras

"Well ah mean ah know there's the park ranger doon at <R Place 11> but they don't have that every sortae space. I believe they should have more cameras in place at these places.[...] I know people go here for like... do you know like tae... tae get away from all that. [...] But at the same time, we live in a society where, just, people can't behave themselves. [...] And ah think cameras should be in place- [...] at <R Place 11> field... I believe they should be. [...]

I just feel like people would feel a lot more safer- [...]if there's, if they seen "oh look, there's a camera up there". You know?" (Participant 8)

"No even in my area. And crime's really high in my area. [pause] Ehm... But that's all I can really think of. Putting cameras in place. [...]That way dya know, like, criminals would think twice. [...] Cause that's probably... they've probably thought to themselves like "ooh, a field, middle of nowhere, no cameras, I can do this to that person and get away with it". (Participant 8)

4- Fight with littering

Fight with littering

Organised community clean-ups

"And I think the raising awareness around this place. Making this more like the- there is some companies which making the public post the pictures from some of the places.[...] To show the impact. [...] They organise the event relate to the cleaning the spaces, so the... eh...[...]I think it's the some other organization calling "the leaders don't litter" or the, there is some of the great, uh, companies which making the walk relate to the cleaning the spaces." (Participant 11)

"I think the cleaning, if it's will be possible. There is some of the- now the new of the fashion, if you go out you could pick up, ah, the 5 things from the place." (Participant 11)

"But, say, mibee a nature walk or...[...] Or... environmental clean-up. Cause the amount ae crap at a, people, like they'll say "ach, what's the point in taking it tae the dump, I'll just drag it across there an dump it in the trees across there". Like, carpets, an cookers, old wardrobes... Gas bottles. Everything." (Participant 9)

"Then tidy the area up so it actually makes people actually want tae go there. "Aw I'm going up there buddy, there's a wee picnic area up there!" (Participant 9)

Community responsibility to clean up dog mess

"Um - the dog mess is a perennial thing isn't it it's a tricky one... and feel as though, I know- I have a friend with dogs who, who go and pick up double, you know someone else's poo whenever they pick up their own dogs poo... they do what they can, coz it's not fair for them all to get a bad name..." (Participant 1)

"I think most dog, uh, most responsible dog-walkers pick it up then." (Participant 3)

"And they all pick up their dog poop there because they know they're getting watched 24/7." (Participant 8)

Fines for littering

"I think should be the fines- should be the fines... or either the- eh some kind of, uh, funds related for someone to like, uh, *cleaning* that place and uh, taking care of that..." (Participant 11)

Reducing tourist footfall

"I think it's the mostly private transport which heading over there- [...] Because the public it's the... not included in the that one. It's private companies which making group around Arthur's Seat [...] Of course, it's making bringing a lot of work for... eh... but I don't think they enough, don't clean up. No right to come if... I think it's that... It should be reduced the number of the... coaches I think. (Participant 11)

5- Improving accessibility of greenspaces

Improving accessibility of greenspaces

Improving accessibility across the lifespan and disabilities

"Another thing, I think parks, if parks had like, em, wheelchair swings on them and stuff like that. From the start of a child's disability life." (Participant 3)

".. Anyway, that's good. I think that's... and then again accessible spaces as well. It does involve quite a lot of concrete to make the spaces accessible 'cause there's nothing worse than pushing a wheelchair that you're sitting in with the wheel- with the wheels caked in mud 'cause your sleeves get all muddy and your hands get all muddy and (?) get all muddy. You're just going to end up clattered with mud." (Participant 3)

"Yeah, that's obviously an obvious thing that needs to be done and its things as simple as, like, paths that lead in from the road need to have a dropped curb. Um, something I've seen elsewhere was they had paths going through but if you're... not already up on the pavement, like, you can't get up onto it if you're in a wheelchair or mobility scooter." (Participant 5)

"I know recently they've been going round the paths at mah bit, they've been levelling them off an putting more dust an that on them an- [...]smoothing them off, eh. But then you get some of them are, they're like that [gesturing], eh." (Participant 9)

Better transport links

"Well, I know what it's like living without a car and if... if um, the bus services are rubbish then you're just not going to go there... I mean it's uh... I suppose it's not a natural priority for bus services to serve green, uh, country places... (sigh) Yeah it would be great. And the other thing is cycle access... [...] So, to go from here to <R Place 6>, the children love <R Garden 1> which is on the side of <R Place 6>... it is a green space isn't it? It's not wild but it's - it's lovely... [...]Uh, that's - you have to just walk along that main road, there isn't really another way, it's a very busy road... and part of it there isn't really- the pavements quite narrow... so to go into town you're alright once you've got on the <R> cycle path, but to walk or... I wouldn't really want to cycle there I don't know, to <R Place 6> from here..." (Participant 1)

"...but if we could all just cycle there, that would, it would feel like less of an expedition." (Participant 1)

"Well, yeah, ah think, yeah... Public trans-, ah don't know... going to more gre-, ya know, green s-, ah don't know goin' t' more green spaces or mak-, ya know, makin' it easy, more accessible like s-, thinks like

that, like I've never been up <R Hills 1>, but ah'd quite like to go but I've n-, I can't drive so that's ma, ya know so, it's just getting there and getting back and all these sort of..." (Participant 2)

"Maybe more regular sort of, ya know, public transport there, em... and more sort of maybe advertising, ah don't know, that that's a- ya know, buses go there, whatever number buses go there em, that sort of thing eh... [...] Yeah and aye lettin' people know how easy it is to get there, uh huh, yeah, yeah ya know... whether it was social media or whether it's whatever ya know..." (Participant 2)

6- Investment is beyond funding for greenspaces

Investment is beyond funding for greenspaces

"Um yabs, sort of. I'm, I don't- I don't presume that it's as simple as just diverting more money towards it" (Participant 5)

"Maybe, yeah, I feel like that's a complicated one to sort of... in simple terms, yes, I think more priority needs to be given to... things like green spaces and sort of public health through sort of getting outside and being active. [inhales] Um...(Participant 5)

"The only thing, I think, about Edinburgh is [inhales] there's no really a lot o' parks fir kids nowadays. Cause any parks that have been, like Portobello Park-[...] Shut it doon and built a high school. And whit did they dae wi' the old high school? Built hooses on it. [...] So, that big park that used tae play f- used tae be like 3 football pitches in it. [...] Scrubbed it. So where did they pit the football pitches? [...] There's naewhere fir kids tae go nowadays tae play football or... anything like that. [...]It's... Which is ah think sort of wrong, like. [...] But... that's the council fir you." (Participant 9)

"Before there used to be, like, community centres an everything like that. Shut the community centres doon, pulled them all doon an build hooses. [...] An then moved the community centre 10 mile doon the road an expect your bairns still tae go to the same community centre. Aye right, bolt! [chuckles]" (Participant 9)

"Naw it's... parks and everything for the council they're... they're probably 3 quarters o' the way down the list. Now-a-days it's all housing an..." (Participant 9)

7- Raising awareness

Raising awareness

Importance of prioritising well-being

"But I feel like... I feel like in terms of you- you know, education and awareness of what- you know, the priorities of local government is, I think that more effort could be made in making people aware. I mean, I feel very strongly about making people more aware of their wellbeing." (Participant 5)

"Yeah, I kind of alluded to it just- and I think the biggest solution in terms of trying to get people to use green space more is- is, to try and get people to prioritize it through an awareness of sort of wellbeing and mental health. I think that's part of it I think... People are beginning to sort of prioritize things like activity and exercise. I think people are a lot more aware that inactivity is bad for you, for so many reasons. Um, and it's not to do with, sort of spending time alone, but that- that can be sort of different from being inactive, um..." (Participant 5)

"...they've got something similar an everythin, and that's all aimed mostly at children... but, em, it's... that

sort of thing is good to be maintained. And it's not- not to be classed as low priority by the powers that be, because it's all about quality of life, I think." (Participant 6)

Role of healthcare professionals in raising awareness of benefits

"... Maybe that word of mouth would be an option ya know em, eh, what else... Mm, more sort of information and stuff in GP surgeries, sort of ya know pharmacies, stuff like that, the benefits and, eh [pause]" (Participant 2)

"Participant Eh, until I went along to speak to mah doctor an everything, eh, got pit on antidepressants an that, he says, he says "ken probably the best cure for depression?" he says "go on a walk". [...] They say even I suppose just up tae the top o' the street an sittin' there for half an hour, just a change o' scenery, anything. He says "it's surprising the amount ae", eh, "help it gives ya" he said, "but see tryna tell mah patients that?", he says, "sometimes it's just goes in that ear an right back oot that ear". They're no interested." (Participant 9)

"Doctor says "do you get out much?", ah says "och, a go a walk now an again, eh, up around mah block an up round the woods an that when I've got my brother's dogs". [...] Ehh, I said, "but that's about it". He says, s- he says, "probably best cure for depression", he says, "goin' on a walk", an he says, "even going up the top o' Arthur's Seat an", he says, "sittin there for a couple o' hours", he says, "watching Edinburgh an watching the world go by". He says "it's suprising the amount ae... how much it de-stresses you". (Participant 9)

8-Willigness to Engage with Greenspaces

Willigness to Engage with Greenspaces

Community use encourages others

"um... I suppose the more it's used by normal, people, as part of their daily lives, the safer it feels..." (Participant 1)

"I mean if, everybody's going out, around you, you know, f-for, you know, for a walk, or f- to play football, or- or... whatever, in a green space or in a park, you don't wanna, you know, miss out, you wanna catch up with them, so..." (Participant 10)

"Ya know ah know that, ah think sort of word of mouth as well ya know, ah know like as ah say people that - that ah know that 'ave recently sort of taken up cycling, they love it so much and they're like always sort of bangin' on about it an', ju- Maybe that word of mouth would be an option ya know em, eh, what else..." (Participant 2)

"Uhm, just by doing it more often since we moved here. Uhm, some of our friends spend a lot of time outdoors in Edinburgh and, yeah, they just dragged us along and... [...] Yeah, just realised that "hmm, this is actually pretty cool". (Participant 4)

"-um, down in <R Big City> there's a park <R> Um, and they re- they refurbished while I was, while I was- right at the start of when I was living there, they refurbished the tennis courts up there and there was actually a little bowling green as well. And it sounds weird but lots of younger people got into bowls. [chuckles] It's a kind of, you know, one of those <R Big City> hipster type things. [...] But it, you know, it was one of those things that made people use it. And then, you know, they used it in their own way. Kind of, nobody expected it to happen but, it's one of those... just weird things that people... you give people a reason to do something and if they feel that they have ownership of it, um... I guess that's kind of an attraction to then keep doing it. Um, so like, I don- then, it kind of, rolls back into that kind of

engagement... making people feel like they, you know it's- it's their space to use." (Participant 5)

"Erm, like for me it's actually quite nice if you're walking through on like a Saturday afternoon, and are some, like there's like a football match going on or something. Like, as weird as it sounds, having said that I need to get away from people, there's something quite nice about that kind of- feeling like there's something going on? Umm... and it's- it's nice to feel like these spaces kind of get used, even though I can sort of maintain my anonymity and stay sort of at the back and not really get involved. [...] But it's nice to feel that it's kind of getting used. It feels like there's a community that use a green space. Um, that's something that is quite nice, so... I don't know, sort of where that fits in [...] -in terms of your questions, but that's certainly something that's- that's good, and I feel like it's an obvious way of getting people to see there is park, um, that they could use at another time other than just using it for sports." (Participant 5)

"Well, I uh [sighs]... best way to get around it... well, obviously new um, letting people know what parks are on and encouraging people to get to the park by... maybe... There's- there's quite a lot happening in Edinburgh and eh, I mean in this area, about trying- people trying to... stimulate people's involvement in the park. And, along the road, at eh, <R Park 10> on the main road... I mean, that- that used to be just lying beer and everythin', but it's used most nights now by- well, not most nights, of- a number o' nights now, by people bringing their kids along. I'm talking about you know small kids, to- to- for football training and everythin'. So, it's being used and things like that. Uh... [...] Well, em, if- if it's seen to be used; if one group is seen to be using it, other people notice it. So, by like word of mouth, people might start to go along to watch something. Eh... I don't know what- what you can do about green space... You gotta keep, well, you've got to maintain it. So, if it's maintained, which is uh, probably the biggest thing- [...] -so's that you can encourage youth's use. And any facilities that they have around it, you know. But possibly do that. So, I don't know how you can make people go to... use green spaces. [...] Just try to tell people how nice it is and things like that." (Participant 6)

"[pause] [inhales] Well, I don't know what we can do about it... maybe friends who just pull us along with them, could be something? Like if, you know, a big group of people goes and you don't really feel like going but you wanna go and- 'cause you wanna be in the group" (Participant 7)

Openness to engage with greenspaces is a facilitator

"But I know that uh, I mean I've - I've - actually no, I've just thought of another barrier - in the past I was more cautious before I became more familiar, I think before they... when did they build the <R Park 1>? I don't know... I remember thinking would I go there on my own? Is it safe? But I've - I've actually, through going, walking through it quite a lot to the allotment, I don't actually feel that way anymore." (Participant 1)

"Well, I mean, it's might seem really extreme, but I would say, um... I tried, like, how does watching TV affects me. So I watched TV f 10 hours, then I stopped, just to try it out. That's what happened, I had a fhorrible headache.[...] Yeah, so I was like, K this is, you know... you, yknow, I was literally I wasn't even getting out from the bed, just watching TV for 10 hours in the bed, and I felt maself really bad [chuckles].[...] So, yeah OK that's not gonna, you know just to feel the effects of, how does it feel to watch TV all day, aand... also I did a bit, you know like, eating... fast foods? Unhealth foods, you know? That, just eating that for three o' four days? An' I could feel the effect on that. And then I, then I like, compared that feeling to the feeling when I was outside walking in the park and doing some exercise and you feel kind of more healthier? And obviously it was difference so... so... you know, it's just the feeling, yeah, the feeling, so..." (Participant 10)

"Especially among the young people... Well maybe, maybe it would be achievable as step by step, you know like uh, you know, just try it a little bit, every day, one day, how does it feel? [...] Ah, just... It's a hard question actually... [...] For, f-you know like, f-five minutes of, having uh, basketball or, actu- or kind

of uh, you know like a exploration. [...] Just five minutes and see, if they enjoy that, and you would like to continue it... 'cause 5 minutes is nothing..." (Participant 10)

"So from then on, I do want and I do, you know, I feel like I want to be outside and I like nature and it does relax me. I thought it was boring at the beginning, you know...[...] But then - yes yes yes, I heard another nature - wa- why are we going onto to the mountains for a holiday [laughs] that's not a holiday! [inhales] Yeah, but that has changed." (Participant 7)

"Yes yes yes... [inhales] But I was also open to it, because there were people in that area who were actually... because it was a small city there were, things that you could do - there was a cinema, there was a theatre, there were... cafes. You could lead a kind of an urban lifestyle if you wanted to. So you sh- wouldn't take advantage of the green space and nature... [...] But for me it was I think my choice to give it a try you know, something new, see what I can do with it, how I can benefit from it and... it had good results [chuckles]." (Participant 7)

Planning ahead

"Sometimes if it's not just up to me but if there's a specific thing with someone waiting for me, that helps..." (Participant 1)

"I mean, depending on your-your stage in life, but an-an organised walk, say we'll meet at the play park and walk, you know... if-if my friend said, "I need more exercise- can you support me with this?" or something like that then we'd arrange a date and do it... just..." (Participant 1)

"If you've committed yourself, yeah..." (Participant 1)

"I think the best th- thing to do, before you get home, like put it in your head, like OK I just gotta shower and get out, 'cause as soon as [laughs] soon as you, you know sit down, lay down on the bed, like that's it [laughs] don't wanna get up." (Participant 10)

Intentionally choosing greener routes and views

"I chose a, I chose a gardeny route you know, coz there's quite a lot of main roads where I try to avoid them" (Participant 1)

"I'd choose it over walking along the road. [...] It's kind of something that's- that might be relevant. Um, if I can walk through somewhere that's- that's green, I would certainly choose to do that rather than walk along the road or... and you know, that's not just because of safety or anything, just because it's nicer [laughs]." (Participant 5)

"Yeah, so I guess in that sense it's been nice, like I would- like this morning, I could have walked on the road, but I looked for a way not to do that. So as soon as it became obvious I could walk through <R Park 2> that's what I chose to do." (Participant 5)

"Also, I chose, that's an interesting point, I chose my room on the basis of, like, the view that I would have..." (Participant 7)
